

THE AMERICAN FARMER

ESTABLISHED 1819

Dept. of Agric.

NINTH SERIES.

BALTIMORE, MD., SEPTEMBER 15, 1883.

VOL. II.—No. 18.

Fall Treatment of Meadows.

Now that the hay is off from the meadows, the propriety of pasturing the aftermath may be discussed. There are conflicting opinions upon the question. Some farmers prefer and advise to pasture the aftermath closely, leaving no dead growth in the bottom to smother the young herbage in the spring and to clog the mower when cutting the next year's hay. Some persons who are not farmers and cannot take a practical view of this matter, and some who are, think it better to leave the aftermath as a protection to the sod against the winter's frosts and thaws. There are some things to be said on both sides, but the right course depends upon circumstances, which vary considerably. For our own part, we prefer to get all we can from the soil, believing that the earth is generous and sufficiently fruitful to give us freely all we can take. Moreover, having had experience with grass lands that have a thick aftermath left upon them, and realized the difficulty of cutting the hay the next season, we would even take extra pains to have the aftermath as closely eaten or mowed off as possible late in the season. We have found, too, that the dense dead grass provides harbors for mice, which burrow in the sod and make havoc with the grass roots. It also protects the sod from frost and thus permits the white grubs and other insect larvae to feed upon the roots, so much as to frequently cut off acres of sod loose from the soil and leave it as free as a carpet upon it. These injuries are so severe and so frequent upon meadows covered with dead aftermath that we should view with great apprehension the probable condition of the sod in the spring. But we have said that it depends upon circumstances whether the aftermath should be eaten or mown or not. Certainly, it depends upon the condition of the grass and upon the character of the soil. If the grass is a new seedling and the roots have not taken a firm hold upon the soil, the aftermath had better be left as a protection to them. If the soil is one that readily heaves with the frost and there is danger of injuring the sod by tearing the roots, the same course should be taken. If the meadow is thrifty and the sod firmly established, we would take off all the grass up to the latest period of the fall, but we would repay our draft upon it by giving back to it early in winter a liberal top-dressing of manure, or just now a dressing of plaster or fine manure, which would strengthen the roots and thicken the sod and make this an equivalent protection by its denseness, as the aftermath could be by its length. One other point should be noticed, which is, that if the grass is pastured it is indispensable that the droppings either of horses or cows should be broken up and evenly spread before the winter, to avoid their wasteful and unsightly effects upon the field the following year. When sheep are pastured this is not necessary, and where there is a choice of stocks to be used sheep will be found by far the best for the purpose. In fact, a farmer might do well to give away the aftermath of a meadow to any neighbor who would pasture it closely with a flock of sheep, for the sake of even clearing of it off and the return of fine manure the flock would make to the soil.—*N. Y. Times.*

North Carolina Wheat.

A novel exhibition was made in North Carolina this year, which was remarkable for a State which has been stigmatized as the "Rip Van Winkle" of the Union. It was a fair for the display of wheat samples and cattle, and the account in the Raleigh papers shows that that staid old State may be found to be among the very best wheat-producing regions of our country, and that she is capable of producing the grasses of every kind to enable her also to become equally successful in the raising of cattle. The *N. Y. Times* says: "The stock was very fine and the cereals and grasses made a display that could hardly be rivalled elsewhere. There were 128 varieties of grasses on exhibition. Of wheat there were 46 exhibitors. Some of the stalks of wheat were 5 feet ten inches high; samples very numerous; wheat beautifully cleaned and well sacked, grain full and plump. The exhibit represented the product of 200 acres, grown in various sections of the county and surrounding country. The average of these 200 acres, by measurement, is 31 bushels per acre. The largest yield is that of Mr. R. L. Cox, of Lenoir County, who raised 46 bushels per acre, manured with 200 pounds of fertilizer; next five acres, Geo. Mitchell, Winston, produced 40 bushels per acre, one sack fertilizer; Marshall & Dull, five acres, 30 bushels per acre, one sack fertilizer; Isaac Petree, one acre, 28 bushels, 200 pounds fertilizer; J. W. Spears, five acres, 25 bushels per acre, one sack fertilizer; J. P. & C. E. Crews, Winston, five acres, 24 bushels, one sack fertilizer; and several others, unfertilized, running from 12 to 20 bushels."

Of cattle there was a very good display, especially of Jerseys, Guernseys and Devons, also a number of fine horses. Governor Jarvis was present and delivered a brief address of a practical character calculated to arouse interest in agriculture. His presence, he said, was as the Governor of the Commonwealth, and he came at their bidding, not for any political purpose, but in the discharge of one of the highest duties of his office and prompted by the interest he felt in such occasions. He came to give an evidence of his cordial support to such enterprises as these, which these patriotic and progressive gentlemen had undertaken. He was gratified to see before him such a large number of intelligent farmers, called together for the purpose of being benefitted in the business of their life. He was in full sympathy with these movements; agriculture was the basis of all prosperity, but the agriculturists had too few means of contriving for the promotion of their objects and purposes and for the elevation of themselves and their business. These annual reunions ought to be extensively utilized in every community for the purpose of uniting all agricultural elements in efforts of improvement. This Forsyth fair has great capabilities, and the exhibit made to-day proves how varied and rich are the resources of this section. He rejoiced cordially in the prosperity of which he saw so many evidences around him. In

the State generally he witnessed great improvement and he was proud of it. We must march forward to the music of progress.

Although he had found great prosperity in every and all sections of our great State, he had found none more decided than here at this favored region. He spoke of the great improvement in the town of Winston, that had been so notable at each of his successive visits, and he rejoiced in this progress and prosperity. He would not undertake to instruct them in agriculture, but there were some thoughts he would like to recall to their remembrance. After some further observations he spoke of the manufacturing interest of the State, which he hoped to see fostered and developed. No State in the Union offered more facilities and advantages for manufacturing, and this was being recognized. Five years ago we had fifty cotton mills, with 1,800 looms and 100,000 spindles. To-day we have seventy cotton mills with 3,000 looms and 176,000 spindles.

The woolen interest had increased in like proportion; the same with other branches of manufacture. Again, the mineral development of North Carolina was far in excess of anything elsewhere. He did not underrate them, but that candor compelled him to say that agriculture was more important to our people, and that our advance in agriculture had been still more gratifying. In 1870 we reported 145,000 bales of cotton; in 1880, 339,598. Since then we have raised 450,000. And the quality has increased as much as the quantity. Of tobacco we reported in 1870, 11,000,000 pounds, and in 1880, 27,000,000 pounds; so said the census. It was the same with corn and wheat. There had been a marked improvement in every department. The occupation of the agriculturist was the most honorable, independent and most conducive to happiness of all the employments of mankind. He who tills the soil which God made and converts the sunlight and dews of heaven into a bale of fleece or cotton or a sheaf of golden wheat, had obeyed the divine command, and, besides, had contributed to the wealth of the world.

Power and Variation of Plants.

(N. Y. AGRICULTURAL EXPERIMENT STATION.)

BULLETIN NO. LIX—SEPT. 5.

The power exerted by growth is something surprising. In the experiments by President Clark upon the squash, this fruit in growing was able to raise 4,125 pounds, and carried for ten days 5,000 pounds without injury. The frequent displacement of flagging stones, and the injury often done to pavements by the roots of shade trees, make it evident that growing roots of firm wood exert, under suitable conditions, a tremendous mechanical force.

The power exercised by an annual root is also exceedingly great, as shown in a case of a long blood beet planted at the Station, in an inch drain tile set upon end and buried in the soil. This drain tile was split length-

wise with the greatest ease as the root outgrew its accommodations.

One of the best roots planted out for seed has presented a novel feature in growth. Instead of throwing up a seed shoot it emitted branches from the root, and these branches coming to the surface, threw out leaves, thus forming a cluster of roots, which at date have grown as annuals, showing no tendency toward seeding.

We have this year among the Beauty of Hebron potatoes, one plant which has developed tubers in abundance in the axils of its leaves. In one axil is to be seen a branch which has swollen in three places into tubers, in no wise appearing, externally, different from a normal tuber, save in the green color produced by exposure to the light.

In this case rust, or blight, has affected the leaves of the plant, and is also to be seen upon the tubers, thus affording rare opportunity of noting the progress of the rot upon the tuber. So far as a casual observation can extend the leaf blight and tuber blight affect both tuber and leaf in the same manner, and whatever differences are later observed come from the difference in the structure of the affected parts rather than from any especial difference in the fungus growth.

In observing the many varieties of the potatoes planted side by side, we cannot but note the variations in habit of growth, habit of tuber formations, and resistance to blight, as apparently inherent in the variety. In some varieties the tendency in the tuber to appear above the surface is strongly marked, in other varieties the tubers remain below ground. Some varieties are already infested with leaf-blight while adjoining varieties are entirely free from it. It is at present too early in the season to offer conclusions, but it is probable that variety differences are to be considered in whatever directions we may have to offer relative to the growing of the potato as a field or garden crop. Thus in notes made upon 102 plantings, some 80 or more varieties, 3 at date show very much potato rot, 23 show much, 33 are scarcely suffering, and 43 are not as yet affected. It seems scarcely desirable at this early period of report to name the rot-resisting sorts, as this will be done far more effectively at a later date.

As this bulletin deals with variations, we may mention that one plant of a row of seed onions of the White Globe variety, has sported into a top-onion, the cluster of small bulbs replacing the normal flower formation. These little onions resemble the parent form in all but size, and the occurrence shows how new, and apparently divergent, varieties can at once appear.

A row of wild carrots, from seed gathered last fall, has yielded all annual instead of biennial plants. Rows of sorghum and salify, grown from seed collected from plants which were annuals last year, are furnishing annual plants this year, thus illustrating how easily and quickly the habits of some plants

can be changed through the art of selection. It is probable that a check to a biennial plant has a tendency to hasten the seed-bearing, and unpropitious circumstances may seem at times to almost change the nature of a plant through the shortening or obliterating of periods of growth. Yet while types may be disguised they can be usually recognized even through apparent changes, when carefully and intelligently sought after.

R. LEWIS STURTEVANT, Director.

Changing Seed.

Many farmers of our acquaintance are accustomed to change the seed of their small grains, corn and potatoes, occasionally; more particularly that of grain and potatoes. We think it a good plan. Whether from careless habits of selection, or from being grown year after year upon the same soil and location, causes their deterioration, is not so clear, nevertheless a change of seed of the various grains and roots upon the farm is most always attended with beneficial results. Growing the same crop in one locality from the same seed, year after year, often tends to deterioration. It is said that the oat grown in the cool atmosphere and soil of Maine and New Hampshire is found to grow more luxuriantly when sown in the Middle and Western States, and uniformly turns out heavier weight to the bushel. If the same seed is sown year after year, in the latter States, without new importations, the produce per acre and weight per bushel gradually deteriorate.

The same rule is applicable to this grain and also rye imported from further South to the colder North, as we know from experience. The farmers of Bermuda always grow their potatoes from American seed, and in many sections of the South, Maine potatoes do duty as seed, by which our city markets are supplied with the early vegetables in advance of our own crops.

The farmers of England, who raise excellent cereals, roots and grasses, are very particular in the selection of seed, procuring it from a foreign country if possible. In the north of Ireland, where flax is grown extensively, a country renowned for its beautiful Irish linen, the farmers prefer seed brought from Russia or Holland, to that grown by themselves, as they find the change very beneficial.

Those conversant with the vast business of our seedsmen and florists, know that the finest bulbous and tuberous rooted plants are annually imported to this country from Holland and Germany.

While this is the existing state of things, and in view of all these facts, we are not prepared to say that if sufficient care was taken by our farmers in the growing and selecting of the grains and grasses to propagate from, far better results might be attained than are at present. Take corn, for instance. If the same system was pursued with that as with our small grains, the same fault of deterioration, would, we doubt not, be apparent. But no one thinks of going to his crib, to shovel up a basketful of corn indiscriminately, and shell it out for seed. The farmer carefully selects the best ears at husking time, and saves them by themselves from which to procure his seed the following season. And so the best is selected year after year, and instead of deteriorating, the corn crop is improved in earliness, productiveness and quality. What the same rules, applied to the small grains in the way of selection for seed, would do, doesn't seem to be so hard a conundrum.—*Leviston Journal*.

When wet weather makes digging ditches impracticable, it is an excellent plan to mark where underdrains are needed. Unhappily on most farms failure of crops indicate the places plainly enough, and very often the crop that failed would have fully paid the expense in one year.—*Er*.

Our Mineral Productions.

The chief of the Division of Mining Statistics, Technology and Geological Survey of the United States has just given some figures respecting the mineral production of this country during the year 1883 and the first six months of 1883. One may derive some idea of the extent of our mineral wealth from the fact that during the year 1882 the value of the metallic products was \$219,756,004, exclusive of the mining productions. This is a very large amount, and we can get an idea of the extent of our industry when the fact is revealed that not until the year 1883 did the value of our exports or imports reach that figure. Iron heads the list of the mineral productions in point of value, the spot value of pig iron for that year being \$106,386,429, and for the first six months of this year the value of the same was \$60,024,226. Silver stands next in the list in regard to value, its coinage value for 1882 being \$46,800,000. Gold once second and probably first in regard to value thirty years ago, is now third, its coinage value in 1882 being \$32,500,000. Copper is fourth in the list, with a value of \$16,033,001. Lead follows with a product valued at \$12,626,550; zinc, \$3,646,620; quicksilver, \$1,487,537. But coal constitutes the most valuable product of the mines, its value for 1882 being \$146,635,581, and for the first half of the present year \$69,025,226. Some of the other non-metallic products taken out of the bowels of the earth are lime, \$21,700,000; petroleum, \$23,704,698; salt, \$4,320,143; cement, \$3,572,750. The total value of non-metallic products in 1882 was \$226,156,402, which added to the metals makes an aggregate of \$445,912,406. Thus it appears that the subterranean wealth of this country is a large factor in our industrial greatness.

Improvement in the Management of Our Fairs.

We have often thought that the manner of making the stalls for horses and cattle at our Agricultural Exhibitions could be improved upon to the manifest gratification of all who attend them, and we are gratified to find a suggestion upon a branch of the subject is being brought before the managers of the Fairs of the West, by the influential editor of the *Breeders' Gazette*, who says:

"One of the needs of the hour in connection with all American shows of live stock, is better facilities for public inspection of the animals on exhibition. All fair-goers are cognizant of the difficulty of obtaining 'a good look,' especially in the horse and cattle classes. Stalls are either locked up tight, or animals are so covered with blankets as to render a satisfactory examination out of the question. Of course exhibitors have some rights in this regard which the public should respect, but there is something radically wrong in the system of fair management now in vogue. Except one be present at the time the various rings are being judged, it is next to impossible to form any conception of the character of the stock on exhibition. Why may we not copy with advantage from some of the trans-Atlantic shows? At the 'Royal,' for example, all the animals in the horse and cattle classes must be brought out each day and paraded around three or four times in front of the amphitheater, so that every visitor can get a good look at them. In addition to this, a sign is erected, which tells, plainly, just what class is being paraded; and then each animal wears its number on a large card suspended by a cord or ribbon from the neck. The bystander, catalogue in hand, can then turn to it and get all the information he may desire about the name, age, ownership, breeding, etc., of any animal about which he may desire to obtain such information. This is certainly a most desirable feature, and might readily be adopted

by both the Chicago and Kansas City Fat Stock Shows. There is ample time, after the closing of the entries, for the publication of a catalogue, and the sales of such a work would amply repay the outlay, to say nothing of the additional satisfaction which such a thing would give to visitors.

"During the writer's visit at 'The Royal' Show at York, in July last, he was more impressed with the value of this cataloguing of the animals, and the daily parade, than with anything else connected with the management. It will be a long step in the right direction when our most important stock shows or fairs shall close their entries long enough in advance of the opening day to enable them to adopt this system. Our exhibitors could soon be educated up to it, and all will be pleased and interested by it. It would happen here, as in Great Britain, that animals will be catalogued which, from various causes, may not be shown; but this is only a trivial objection, compared with the great benefit to be derived from the publication of such a catalogue."

The recommendation thus made by the *Gazette*, was predicated upon the announcement made by the Kansas City (Kansas) *Indicator*, where a fat cattle show is to be held this fall also, as well as that at Chicago, that "an exhibition that will be well worth traveling a long distance to see will be the procession of about 600 thoroughbred cattle on the streets of Kansas City, on Thursday, November 1st, the opening day of the Fat-Stock Show. The breeders of polled cattle promise to furnish about 300 head of this unprecedented street parade." This is a step in the right direction.

Live Stock.

Fattening Cattle.

If it be the fall of the year it will be well to begin with the wastes of the farm. The pumpkins, squashes, small potatoes, turnips and even apples, if given in small quantities, may be utilized in this way to good advantage, not only because they are wastes of little value otherwise, but also because by loosening the bowels and quickening the secretions, they help to bring the cattle into a thrifty condition. If such food does not fatten, it is the best preparation for a course of fattening food. A single week of such food, with good hay, will make the animal look better, though it may not have gained a pound in weight. The giving of meal should begin from the first, and perhaps a good rule would be to use about thirty pounds of hay, fifty pounds of roots, and five quarts or ten pounds of meal for every thousand pounds of live weight. The proportion of the amount of food required to the live weight of the animal is not invariable, as the coarse, unthrifty, paunchy ox requires more to sustain life than such a one as described above would require to keep it fattening rapidly. Here the eye of the feeder needs to be trained again, and it needs to be on the alert to detect any symptoms of being over-fed or of a capacity to take more, and after a while the grain rations can be increased and the ration of hay can be reduced accordingly, the object in view all the time being to convert as much hay and grain into beef as can profitably be done.

To keep the cattle thriving it is important that they be kept comfortable and quiet. They will do better if kept in their stalls most of the time, if they have good beds, and the stables are well ventilated so as to furnish them pure air and at the right temperature—neither too warm in summer nor too cold in winter, though they will do better in a place comfortably cold. The stables should never be cold enough to allow the manure to freeze on the floor behind them, or water freeze in front of them. They should have pure water twice a day, though while eating the roots they will require but little, and it will be

better to feed the roots before offering the water, in order to induce them to get along with as little water as possible. Some feeders give no water while fattening on roots and pumpkins, but this seems cruel, and it is doubtful if the animals thrive as well as if allowed water. It is not well to give salt while fattening, unless with a view of creating thirst, which they will quench by eating more roots, or it may sometimes be added to the meal if they appear to have got a little "off their feed" by having been fed too liberally. But when they have been overfed the best remedy is a total withdrawing of the grain ration for one or two meals, and perhaps a little more exercise in the open air.

The manner of feeding is of equal importance. Adopt regular hours of giving food and do not vary from them, except that in the fall and winter the morning meal may be given at a later hour and the evening meal earlier as the days grow shorter, while as the days grow longer the hours for morning and evening feeding may be made farther from the noonday meal. Avoid as much as possible disturbing fattening animals after they have lain down at night. The practice of "feeding round" the last thing before going to bed is a bad one, for if the cattle have had a reasonable allowance at the usual supper hour, they do not need to be called up to eat again any more than the farmer himself needs it after he has retired for the night. Going to the barn to see that all is right there is well enough if the cattle are used to such visits, and do not associate them with the idea of being called up to eat or being driven up for any other purpose.—*American Agriculturist*.

Sending Cattle to the South.

It has been considered a risk to send cattle to the South from the more Northern States earlier in the year than October or November, on account of the danger from the climate. The prosperous condition of that section now, and the increased interest paid to live stock renders a warning in this connection not untimely, as it is probable that large purchases will be made of many classes of improved stock during the next year. In a communication to the *National Live-Stock Journal*, Mr. A. B. Allen refers to the subject as follows:

"As October and November are the most proper months for sending cattle to the South, I will here, for the benefit of all concerned, give a few directions, furnished me, in 1842, by the late Col. Wade Hampton, of Columbia, South Carolina—father of the present Gen. Wade Hampton, of the same place, and now United States Senator. He possessed a large plantation, and was a successful breeder of Shorthorn cattle, thoroughbred horses and fine sheep and swine. He says:

"All cattle imported from England and our Northern and Western States, are liable to be attacked by a fatal disease which I take to be inflammation of the brain. Cattle from eight to twelve months old are less subject to it than those more advanced in life. If they survive the following summer and autumn, I consider them safe, although special care should be taken of them the second season. They should be brought into the South as early in autumn as possible, kept in good growing condition through the winter, and in the spring be removed to a high, healthy position, have easy access to pure water, and their pasture as much shaded as the nature of the ground will admit. In August and September they should be kept in a cool stable during the heat of the day, and at night also, the dew at that season being almost as injurious as the intense heat of the sun. With these precautions, I think more than half would escape the disease, the first indication of which is usually a languid appearance of the animal, followed by the loss of appetite, short, quick breathing, with more or less fever, and not unfrequently accompanied with a cough. I have heretofore considered this disease incurable when once fully established."

To the above I will add, that as late as May and as early as September, I have found

it excessively hotter in lower Southern latitudes than in Columbia, so that in these it is not advisable to send cattle to arrive there earlier in the season than November, or later than February. In such latitudes, also, they ought to be housed from the last of April to the last of October, moderately fed with fresh-cut grass or clover, rye and oats, when in blossom, or at least before the grain becomes hardened at all, sweet Indian corn, or amber cane, or sorghum, as soon as tasseled, and give all the pure water they will drink, morning, noon and night, or still oftener when a spell of very hot weather prevails. Thus kept, the cattle cannot get at pernicious weeds or water, and by darkening their stables, they are freed from the sting of insects, which is often the cause of death.

The quick breathing, accompanied with fever, of which Col. Hampton speaks, is owing to the increased pulsation, which always attends the bovine species when transferred from a cool to a hot climate. It generally doubles, and remains so for some time after this change of location. I have been informed that hornless cattle endure a hot climate much better than those with horns; and in order to save the latter from the fever when attacked, the shockingly cruel remedy of sawing off the horns has been prescribed.

There are many very pretty Red Polled cattle in the lower part of Georgia, and I presume in other Southern States. If some young Norfolk or Suffolk Red Polled bulls could be imported from England to cross on these cows, a very fine progeny would be the result, for these are celebrated as being a generally useful sort, like Shorthorns, superior alike in the dairy and for the shambles. When executing orders for cattle to be sent from the North to the South, I invariably refuse to fill them, except during the season from last of September to the fore part of March, according to the climate there."

Food for Fattening Sheep.

The most economical and appropriate combination of food will depend upon cost of different foods in the locality. Nearly all the grains raised are healthy for sheep unground, except millet, and this is not economical, and probably not healthy; fed unground, because of its small size and hard husk, it is not masticated and is not digested, but mostly passes through the animal whole. Millet should be ground before feeding.

Rye, oats, barley, buckwheat, peas, beans, Indian corn, wheat, bran, shorts or middlings, and oil meal, are each and all good food for fattening sheep—but sheep should not be fattened upon a single food, as they are fond of variety, and will gain faster when allowed to have it. Sheep are so fond of succulent food, that they will pick over large fields, in open winter, trying to find it. They suffer when kept wholly on dry food for several months, and, for this reason, the last food mentioned, oil meal, should be provided in small quantity for them. It is not usually dearer, according to its feeding value, than other foods in the list. Linseed meal has a very soothing and healthful effect upon the digestive organs, and one and a half pounds to each sheep, per week, is worth all it costs as a promoter of health. It seems to have an effect similar to turnips, when sheep are upon dry food. Corn is too heating to be fed alone, but when fed with one-half pound of oil meal per day, it does not show any of its heating effects. Therefore, if corn is cheap, it may be the most economical to feed $1\frac{1}{2}$ lbs. corn with this small amount of oil meal. Bran and middlings are often very low in price, and when this is the case, and corn is also low, 1 lb. of middlings and 1 lb. of corn may be fed, or in equal parts by weight. As a single food for fattening, oats is probably

the best. The ten to twelve pounds of husk on oats per bushel, is what renders this food healthier than the more concentrated food, corn. This husk renders the whole porous in the stomach, and thus more easily saturated by the gastric juice. Besides, oats are a nitrogenous food, and supplies the animal wants for this element, but oats usually bear a proportionally higher price in market, and may often be too dear to feed.

The feeder cannot err in giving too great a variety in the food of sheep. The best ration we have ever known fed to fattening sheep was composed of equal parts by weight of oats, corn, peas, and millet, and to fifteen bushels of the mixture was added one bushel of flaxseed, and ground fine together. Each sheep was fed two pounds of this ground mixture with hay, and made a regular gain of three pounds each per week, besides growing an unusually fine staple of wool. This small amount of flaxseed is peculiarly soothing to the digestive organs. It is a perfect preventive of all diseases caused by dry fodder. Such a ration as this may be considered quite impracticable upon a Nebraska winter corral; but since much of the food must, usually, be transported by rail or water, we would suggest that this ration, or something similar, may be compounded and ground at some milling centre, and then shipped to the place for use, costing no more than to ship the raw material.

Sheep may be fattened just as well on such a ration as this with straw for coarse fodder, requiring only a slight addition to the grain ration. When it happens that corn is fed alone as the grain food, it is well to put hay in the rack, and then spread the shelled corn on the top of the hay. The sheep will eat the corn as it falls down into the trough with the fine parts of the hay, and in eating the corn, will also eat hay with it; thus bringing the masticated corn into the stomach mixed with the fibrous hay, rendering it more porous for the easier action of the gastric juice. All ground feed at the winter corral will, of course, be fed dry.

We hope these suggestions may be of service to some of the winter feeders of sheep on the Far Western ranches.—*Nat. Live Stock Journal.*

Sheep Farming.

Despite the constant attention which is called to the value of sheep, not only as improvers of the land, but as profitable farm animals, for wool and mutton, there are many farmers who have never raised or kept a single sheep, though their farms are adapted to raising sheep largely and profitably. Why this is we cannot imagine, for facts and figures can be had by the score to prove the profitability of sheep breeding, if necessary, and about the only drawback in many localities is the loss occasioned by dogs. Many a rough, wornout or neglected farm might be brought up rapidly and be made paying land, by breeding sheep thereon, as the manure from the sheep is one of the most enriching of manures, and is evenly, finely distributed. Of course they may not do this without being fed something besides what they can get in

the fields, yet this additional food works to the profit of the breeder in two ways—it not only insures good and profitable growth of flesh and wool, but it makes the manure richer and more valuable. Even poor farmers can give sheep a trial by commencing in a small way, and then, as means and experience are gained, the flocks can be gradually increased by purchases, though the natural increase from a small flock of sheep is by no means inconsiderable, if properly managed and cared for as they should be. Like any other stock, they must have good care and food to secure the greatest measure of profit.—*Farm and Garden.*

A French Chapter on the Pig.

From our Correspondent in Paris.

The pig is a truly singular quadruped by its shape and habits. It was introduced to the New World by the Spaniards, and is now at home in all climates. It is contented with anything, provided it be full; it is easily reared, and invaluable in country towns far away from supplies of fresh meat. The ancients and the Easterns hated the pig, and it is still rare in Asia. Moses it is surmised denounced the pig because the Jews, being an agricultural, a pastoral people, might neglect other domestic animals for the convenient pig. Others allege the pig was proscribed from a belief that its flesh engendered leprosy—a malady common to Egypt and Arabia, something akin to measles and trichine of to-day. Montesquieu thus defends such as a good local law. Saint Clement asserts Moses prohibited the pig because in rooting it destroyed grains and vegetables, consequences sharply felt in Palestine, where the soil is but little arable and only 4 or 5 inches deep.

The flesh of the pig does not differ from that of other animals, only if eaten in excess it produces indigestion and may induce contagious diseases. It is selected as the type of stupidity, which is not quite exact in presence of the many "learned pigs" on record. It will follow the person that feeds it: in Germany, when the herd arrives in the village to collect the pigs of subscribers to feed in the forests on mast, he rings a bell, on hearing which the animals arrive in a scamper and fall in. The pig defends its young ferociously, and when followed they run up to embrace the mother before selecting a teat. When the Duke of Lancaster laid siege to Rennes, Captain Lafort had only one sow left to feed the garrison, while the English army had quite a herd of hogs. At night the captain let down the drawbridge, and had the sow driven towards where the English pigs were parked: they heard her squeak, followed the cry, and 2,000 crossed the drawbridge, which was drawn up, and thus saved the garrison.

The variety of pigs depends on climate and food. In warm climates they are generally black as wild boars; in cold climates, white. The long-eared race is peculiar to Westphalia, a region celebrated for its hams. Brown pigs are considered as most liable to measles. In Italy the Parma pigs are in repute; they help to make the famous Boulogne sausages, they are black, short in legs, and run so rapidly up to fat as requiring to be raised up to be fed. The Normandy race is similar in these traits, only it is white. In the latter country the boar can serve at eight months, and is allowed to continue so till two years; 16 to 20 sows are allowed, which is excessive. At two years the boar becomes vicious, and so farmers break his tusks in the lower jaw. The sow preferred for breeding should have long sides and be of quiet habits. The pigs should be kept warm and clean, they will never fatten in dirt. In many styes a scratching post is erected and plenty of fresh water supplied. A little leaven is frequently placed in the trough, as pigs like the acid or fermented relish. Burned oats are given to

make the sow take the boar, and November to May is the season preferred for such. To prevent the mother from eating her progeny she is fed well a few days before farrowing, and her back sponged with aloes. The sow is allowed to breed at ten months till five years.

THE CROPS.—The outlook for farmers is not promising—save for potatoes. The harvest in course of completion will be less than last year by a fifth to a third; beets are running into leaf; the vintage will be more abundant than in 1883, though the oidium has appeared in Burgundy. As for the phylloxera nothing stops its march; the planting of American vine stocks is rapidly extending.

The Dairy.

Dairy Products in Baltimore County.

The specimens of butter offered in competition at the Timonium Fair were more numerous than usual, outnumbering those of last year five to one, and were noticeable for quality as well as quantity, which was the result in part of the wisdom and liberality of the managers in offering special premiums. And where was the garlic, so objectionable last year? In all the fifty exhibits, numbering more than an hundred pounds of butter, not a trace of garlic taste was to be found, except in one parcel, and that taint was very faint. Surely this is a long stride towards perfection, and should be a source of much gratification. In the class for children under 16 years of age, there were 14 entries, and many of them, if not all, would have reflected credit upon men and women. We would suggest to the management to specify that the rolls and prints should be made at the same time if they offer special premiums next year for this class. One of the successful competitors in this list would not have been so successful had this been one of the conditions at this show. In the class for butter of "a week old," the competition was very close, as might be expected where twenty-one very creditable parcels were offered, and fine discrimination had to be used; several of the specimens would have passed for very fresh butter; three of the specimens, however, distanced the rest, and there all the points—appearance, marketable worth, texture, color, fragrance and taste—had to be tested critically before a decision as to excellence could be arrived at. Two very good specimens, otherwise, had been churned too long or had been worked too much after they came from the churn, for they had a salve consistency and were without a clearly defined grain. Several specimens of fanciful shapes or forms of butter added to the beauty of the display, and suggested that a class should be opened for competition in that particular. Taken all in all, Baltimore county has never had such a fine display of butter at any exhibition, and the people will be proud of the exhibit of 1883. E.

Training Heifers to Milk.

In the FARMER of August 1st is an article on the above subject, and the author says, "this is sometimes called 'breaking', but the term is too harsh," and then goes on to tell how to "break" a heifer. I "train" my heifers, commencing when they are very young, say a week old, and go through all the motions of milking, handling the udder, pulling the teats and rubbing the legs, and in fact "handling" her all over. The result is that when she drops her first calf she is thoroughly "broken." One of my heifers calved yesterday and I can milk her from either side or behind and she does not think it anything out of the usual order. I would suggest caution in pulling the teats of heifers before they calve, as there is danger of bringing them to milk before their time. Any one trying this plan will never have to "break" their heifers. A. L. CROSBY.
Rockland Farm, Baltimore Co.

Poultry Yard.

Poultry at Timonium.

Though the display was not a large one, yet the winning birds were excellent specimens. The 1st and 2d Light Brahma chicks were remarkably fine specimens, showing brilliant yellow legs, finely feathered, with good middle toe feathering, as called for by the new standard, excellent neck hackle. The birds were from the yards of Dr. Cairnes, of Baltimore county, recently purchased by the exhibitors. The Black Cochins were in excellence above the general average, and much the finest display of this variety yet shown at Timonium. The Brown Leghorns, especially young birds, were good. Whites, one coop only of No. 1 birds. Plymouth Rocks were the leading class, some grand specimens being exhibited. The winning birds shown by Mr. T. W. Hooper were very fine, with well-barred, clear and distinct plumage, brilliant yellow legs, free from black specks, and the chicks were uniform and good in size. Games and Hamburgs, did not equal former displays. The French breeds were not represented. The Bantam class was a good one, the premium birds first class. The 1st premium Pekin Ducks were an unusually fine pair. The pigeon display was not large but the birds exhibited were very fine, the fantails, having 34 and 36 feathers in tails and very stylish. All in all, the exhibition in this department was much above the average at agricultural shows. The society had the coops cleansed and whitewashed, and every care and attention was given the birds, much to the satisfaction of the exhibitors. G. O. B.

Hen Pests.

If you expect to keep your fowls and their premises free from chicken lice, you must wage a constant warfare. The ounce of prevention, in the shape of a proper place for the fowls to wallow in, and an occasional whitewashing, and washing the perches with coal oil, is worth more than several pounds of cure after the lice once get a foothold on your fowls; but when they do get them, don't be discouraged, but go to work faithfully until they are exterminated.

The plan that I have given repeated and thorough trials—and that has never failed me—is to whitewash the inside of the houses every spring and fall, and once or twice during the summer; to fumigate occasionally with sulphur; to use coal oil freely, as a wash, about the perches, and on the bodies of the fowls; to use sulphur or tobacco stems in the nests, and to always keep a supply of road dust and ashes where the fowls can wallow at pleasure. After the dust has been in use a month or six weeks, the contents are emptied into a barrel and used to sprinkle on the platform, and the box is refilled with a fresh mixture of dust and ashes. Anoint the fowls every two weeks with a mixture compounded of five ounces of sweet oil, mixed with one ounce of sassafras oil, and applied with a sewing machine oil can. Carbolic powder is also an excellent remedy for lice on chickens, and to mix with the contents of a dust box.—*Fannie Field, in Prairie Farmer.*

FALL PRECAUTIONS.—Now is the time to commence operations to make the houses of the chickens comfortable previous to the fall storms. Fowls roosting in draughts are quite sure to contract that dread disease, the roup, and once started at this season of the year it will run through the entire flock. A good supply of dry road dust should be secured now for future use. The houses should be freshly white-washed and put in a thoroughly clean condition,—for if your birds commence winter with clean quarters and in good health, they will consume less food and have a good record in the egg basket. Good attention to fowls will prove a well-paying investment at this season of the year. Try it and be convinced. G. O. B.

Horticulture.

Fruit Trees in Sod.

Ten years or more ago a small number of peach trees were planted here near the gardener's cottage. Most of these trees stood in a piece of ground which is annually cultivated in vegetables. A few others were destroyed some years ago in erecting a new greenhouse and around one tree left near the greenhouses the grass has been allowed to form a thick sod, which is kept mown during the summer. The trees which stood in the truck patch have all succumbed to yellows and borers. The tree standing in the sod has made a strong and healthy growth, and for five years has not failed to bear a full crop of fruit. The present year the crop is so heavy that the tree was damaged by breaking down of limbs, (which, of course, we ought not to have allowed, and would not if we could by any means make two men of oneself). This tree shows no signs of failing health, while the cultivated trees are all gone long ago. This is an isolated instance, but I have known hundreds of such, in different parts of the country, until I am satisfied that the continual plowing among peach trees, after they have come into full bearing, is one cause of their early decay. While the trees are young and have not occupied the soil with their roots I have no doubt that clear culture is necessary, but when the tops (and the roots run just as far) meet across the rows, or nearly so, the ground should be made smooth and all cultivation suspended. Then mow clean everything that grows among the trees, and top-dress them annually with manure from the barn-yard or with bone-dust, keep the worms cut out around the collar and keep the tops properly shortened in, and I believe that instead of being exhausted in eight or ten years the peach orchard will last for twenty-five. Just call to mind the oldest peach trees you remember and I will guarantee they stand in fertile, uncultivated soil. The more I observe the habits of all our fruit trees, the more I am convinced that all fruit trees of mature age ought to be kept in a short grass and annually manured. The best feeding roots of these trees are always the surface roots which are injured or destroyed in cultivating. The blight in the pear tree, as I have before insisted, is more frequent among trees that are cultivated than among those standing in sod. The fungus which blights the tops starts from the lacerated roots. W. F. MASSEY.

Flower Garden Notes.

We have had a new sensation in Asters.—For many years the improved forms of China Asters have been a favorite flower, and we grew them on the Eastern Shore to much greater perfection than we had ever seen them here; that terrible pest, the black bug, was never seen there. The only way I have been able to get any Aster flowers here is to sow the seed very early, so as to have them come in bloom by August 1st; they will then be through their best bloom by the time the bugs come. I recollected growing, when a boy, the old single China Asters, from which all the present gorgeous varieties sprung and the present fashion for single composite flowers led me to think of the old single Asters, and knowing them to stand so long after cutting, I determined to get some seed if possible. For many years I have been buying the choicest seed to be had, with the usual result of getting an average of about a half dozen plants from a twenty-five cent paper of seed. This year we searched the catalogues for the old China Aster seed. The nearest approach we could find was "Asters, common mixed, 5 cents per packet." So we ordered the common mixed at five cents, and at the same time sent for some choice Dwarf

Chrysanthemum flowered at 25 cts. a paper. The five cent papers were large, full ones; the twenty-five cent paper had as usual about 25 seeds. The cheap seeds produced an average of about 100 plants per packet; the choice package produced just four plants. Now for the result. The four plants of the Dwarf Chrysanthemum variety are just what I bought them for, and are very fine, but the cheap seed, from which I only expected single flowers, have been a perfect surprise. Of course there are some single ones, and good ones too, but out of one of these five cent papers I have magnificent flowers of the Chrysanthemum flowered, Peony flowered, Betteridge's Quilled, tall sorts, dwarf sorts, and all sorts and colors, truly the most completely mixed seed I ever saw. Hereafter I shall always have plenty of Asters for cut-flower purposes without investing in the named sorts. The only difficulty is in the great variety of heights, which makes a bed of these plants look rough. I would not object to paying 25 cents a paper for the fine named sorts if the seed would germinate with any sort of certainty, but usually the higher the price the fewer plants one gets. I have several times bought Betteridge's Prize Asters in England at two shillings six pence a paper and paid postage on them to this country, only to get two or three plants out of a paper, while I got out of one of these 5 cent papers more Bitteridge Asters than I ever had out of an imported packet. I have written so fully of these seed because, in most sorts of annuals, it is usually much best to buy the best to be had, even at a high price, but a careful person with some of these cheap Asters can soon select for himself choice separate varieties, without the expense and exasperation of failure with the more costly named sorts. For uniform bedding purposes, of course it is desirable to have them of one height, and this can soon be attained by carefully saving the seeds separately.

I am more than ever convinced of the value of Crotons for bedding purposes in our climate. We have bedded out this season about four hundred Crotons. They are mainly C. Interruptum, but we have also tried Queen Victoria, Challenger, McArthurii, Weissmanni, Irregular, Angustifolium, Ovafolium, Bismark and Variabilis. I consider Irregular the best bedder; Variabilis and Interruptum next. These are also the easiest to grow.

We invested in some seed of the new single Dahlias this spring, but so far as we have yet seen them they are perfect frauds. Most of the flowers yet produced are inferior double ones—perhaps those yet to come may be better. What a beautiful flower for bedding purposes the Coreopsis would be if it only grew on plants ten or twelve feet high? It makes such a wealth of bloom that its slender stems tumble about in a way that destroys its usefulness as a bedder. For those who like Marigolds the Calendula Meteor will be a treasure. We saw it very fine at a rockery at the Botanic Gardens. W. F. MASSEY. Hampton.

THE ANNUAL EXHIBITION of the Maryland Horticultural Society will be held September 25, 26, 27 and 28, in the Armory of the 5th Regiment, M. N. G., Baltimore.

"Early Cabbage."

Messrs. Editors American Farmer:

The market gardener is more certain of success of late years in the growing of early than late cabbages. This is owing in great part to their exemption from the attacks of insects and other enemies so numerous during the growth of summer and fall cabbage. They come in, however, for their full share of enemies which makes even the growing of early cabbage a risky business. The cut worm in several instances cleaned up entire patches in this section the past season, rendering it necessary to plant the ground in something else. Salt sown heavily upon the freshly prepared ground had no visible effect on the worms. As soon as the cut worms ceased, countless thousands of small black fleas swarmed in, sucking out what little vitality was left in the plants; those disappearing after a time made room for the common green cabbage worm, which happily were not in sufficient numbers to do much damage. A sprinkling of Cayenne pepper when the dew is on seems to be distasteful to them. Early cabbage, whatever may be said, have to run the gauntlet of all these dangers before getting in condition for market. Summer and fall cabbage are liable to attacks of the European butterfly that lays the eggs which produce the worms so destructive of late years, and which is more to be dreaded than all other enemies combined. One of the chief causes of the failure of so many cabbage fields lately is the difficulty of procuring good seed. Market gardeners have gotten out of the habit of saving their own seed and trust this important matter to strangers. The result is that not one lot of seed in three is reliable. For early cabbage I sow in hot bed about the 5th of February, taking care not to make the bed too hot, as they are apt to dry out or grow up spindly. I transplant to the open ground as early as the ground can be prepared in good order. If the plants are well hardened before the setting out, a hard freezing will do but little harm, provided the plants are set deeply, allowing no part of the stalk to be above ground. The preparation of the ground for early cabbage is a very important part. It can hardly be made too rich, and a liberal application of good ammoniated phosphates is a great help. On good land, cabbage may be raised with commercial fertilizers alone; one thousand pounds to the acre is none too much. A great essential is frequent workings with hoe and cultivator, once a week is none too often. Early Jersey Wakefield is one of the earliest and a sure leader. It is rather small, however. I have had best luck with Henderson's Early Summer and Newark Extra Early Flat Dutch, these are but a few days later and much larger; not over one plant in five hundred failed to head with me the past two seasons. I have never grown early cabbage by planting out in the fall, and am convinced that my custom of starting in a hot bed is best. Fall planted cabbage are apt to run to seed or winter kill, and are at best but little the earlier of the two.

Yours respectfully,
Harman's A. A. Co., Aug. 28. R. S. C.

Kitchen Garden Notes.

We usually try to get our whole planting of celery transplanted into beds, two or three inches apart, early in June. Plants thus treated lift with a large mass of fibrous roots, and when planted in their final quarters grow right off almost in spite of the weather. This season the pressure of other work prevented our transplanting our whole crop, and we tried Mr. Henderson's plan of shearing their tops and letting them stand where sown. We planted three beds of 1000 plants each just before the recent dry spell. The first bed was from those which had been transplanted once, and the others from plants that had been sheared twice in the seed bed.

They are all of the Boston Market variety, but no one would think so by looking at the beds, or would suppose they were the same variety. Not one of the transplanted plants died, while there were many vacancies to be re-planted among the sheared ones. It is fully worth all the trouble to transplant celery in spring. This is nothing new, but I simply want to recommend an old practice which is falling into disuse with many.

Since planting the three beds above mentioned we have planted nearly 2000 more in rows four feet apart. These we mean to only partly earth up, and will bury them the last of November in trenches made through the centre of raised beds four feet wide. In this way we can secure thorough drainage. I never succeeded well in keeping celery in underground trenches, as the New York gardeners do. Their method might do in sandy soil, but here it would be certain to rot.

Mr. Cole has not diagnosed the disease, if disease it be, in my tomato plants. It is not the disease known as "rot" in Anne Arundel. (We never had this disease on the E. S. where I grew over 50,000 plants a year.) The affected plants have not died, but have maintained a sickly existence and ripened fruit about the size of hulled walnuts. I still think the injury is due to the walnut tree roots, as no plants are affected outside of a circle about as far as the roots probably extend, but there are plants unaffected inside of this circle. Though I have had no personal experience with what Mr. C. knows as the "Rot," I am satisfied that it must be of fungoid origin, while my plants examined under a powerful microscope show no signs of fungus in any of its stages. In the same space where the tomatoes are planted are some young grape vines planted, 8 by 10 feet apart, and trained to stakes. There are a number of varieties of native grapes. The space within which the tomatoes are affected is planted with Concord vines, (the tomatoes between them, one row in the ten foot space). Now we all know that the Concord is one of our most vigorous vines, yet, within this space, where the tomatoes dwindled, the Concord has made less growth than Delawares elsewhere (in the same plot), planted immediately beneath a large pear tree. Everything I can observe points to the exhaustion of the soil of elements needed by the grapes and tomatoes. Just what it is I hope yet to discover. While on the tomato subject I will say that for family use I have never seen a better tomato than Acme, but I am inclined to think that if I were gardening for market I should plant it very sparingly, as it is so liable to rot and crack. We recently had two days rain following a dry space. All my Acmes that were near ripe cracked badly, while Canada Victors are hardly affected. I have been for years growing and selecting Canada Victors until my strain as well deserves a distinct name as any other. I grow these to guard against being out of tomatoes at times when the Acme fails us, either by rotting or cracking. When there are plenty of Acmes the others lay around and decay, though they are thrice as productive and more handsome color than the Acme. W. F. MASSEY.

Spring Bulbs.

After our long winter, when, for four or six months, according to the season, no vegetation has shown life, save the Pines and the Spruces and their congeners, we hail with delight the first green blades that shoot through the soil. On this account some of our little, hardy, native plants that give their blossoms as soon as we have a few warm days, deserve careful culture, and it is a pleasure to know that in many places they are garden treasures. The Snowdrop, and the Crocus, and the blue Periwinkle, how quickly they rejoice in the returning warmth! For a mass of bright, rich color in the garden in early spring the Tulip is our main depen-

dence, and it is worthy of all the attention its culture demands. For the best results annual replanting is necessary. To leave the bulbs in the ground in the same place from year to year is sure to result in diminished blooms until the semblance to their former selves is lost. The Tulip is best suited with a spot that is well drained and fully exposed to the sun, and a soil that is a fresh, substantial, friable mold containing some sand. It should be enriched by the addition of plenty of old cow manure well dug in. In forming a bed the surface should be raised several inches in the central part in order to prevent water standing on it in the winter season. The bulbs can be set about three inches in depth and from four to six inches apart, giving the taller varieties the greater distance. The latter part of September and through the month of October is the best time for planting. Before hard freezing occurs it is best to give the bed a light covering of litter or evergreen boughs, or leaves, which are better than anything else. The question arises, how shall we manage with the Tulips? The best to be done in these circumstances is to set plants in the spaces between the bulbs, which are allowed to remain until ripe, and are then lifted and placed in a dry, shady, airy corner, until they have parted with some of their moisture, then they can have dirt and the old skin removed from them, and be placed in paper bags, or in dry sand on a shelf in the cellar, to remain until planting time in autumn.

For winter and early spring sowing in the house, what are known as the Duc Van Thol and Single Early varieties are employed. These come into bloom in the shortest time, and are of a great variety of bright colors. Three or four bulbs should be placed in a six-inch pot, covering them with two or three inches of soil. As soon as potted, water and then set the pots away in the cellar, and cover them in order to prevent their drying out rapidly. After six or eight weeks they will have probably made plenty of roots, and then can be taken up and exposed to the light.

The Duc Van Thol, Tournesol and Single Early varieties are best to plant in beds, as they soonest mature.

The Late Show Tulips require a season somewhat longer, but they are of great beauty, both in form and colors, and are most prized by Tulip fanciers.

The general treatment of the Narcissus in the open ground is about the same as that of the Tulip. By reason of its fragrance, as well as its many beautiful varieties, and its free-blooming, it is quite desirable for home culture. The Jonquils are the most sweet-scented, and are favorites for potting on that account.

In potting Narcissus bulbs it is best to keep the neck or top of the bulb even with the surface of the soil; three or four bulbs can occupy a five or six-inch pot. With proper management the flowers can be had by the winter holidays. To do this the bulbs should be potted about the first of October, the pots set away in a cold-frame, or in some snug corner, and covered at least a foot deep with leaves, and be left for five or six weeks, when some of them will be started, and they can be removed to the house, but not into strong heat; a temperature of 60° will produce better flowers than a higher one. The Roman and the Paper Narcissus and the Jonquils should be selected for forcing. Narcissus bulbs flower quite freely in vases of water.

The varieties of Ixia are very beautiful and interesting. The bulbs are called half-hardy, and in this climate are only raised in the house, treating them the same as Narcissus. The flowers are from one to two inches in diameter and of many colors.—*Vick's Magazine*.

A new Clematis, Jackmani alba, has just been introduced, which promises to equal its parent, Jackmani, in all its good qualities.

AGRICULTURE IN THE SOUTH.

Progress in Agriculture—Is there any Room for Further Improvement?

BY TH. POLLARD,

Ex-Commissioner of Agriculture of Virginia.

Great progress has been made of late years in one important interest of agriculture in the South vitally concerning the farmer, viz: improvement in stock breeding. Virginia and other Southern States have for many years been paying attention to improved breeds of horses, but many of us can remember when one breed of cattle, and hogs, and sheep was considered about as good as another, and even now there are some who are skeptical about the advantages of improved stock and say that the "breed lies in the corn house," or in other words, in good feeding. To such persons it is only necessary, it would seem, to address the following proposition: Suppose an intelligent physician, understanding well human constitutions, their developments, their defects and their strong points, and knowing moreover the histories of families, their defects and inherited diseases as well as their reputation for robustness and longevity, were then to select the best specimens of men and women with whose antecedents they were acquainted for inter-marriage; then were to select from their progeny the best specimens and continual this process for a number of years, avoiding any close "in and in breeding" or continual relationship in marriage, who could doubt but what we should have a race physically superior to ordinary men and women: strong, robust and well-developed in all their parts? This is just what intelligent stock-raisers are now doing with their animals, and it is a source of gratification to know that we have in the South many breeders of first quality, judicious, liberal, capable and honest; men who are doing much to advance the great interest in which they are engaged. Still we have many farmers who do not appreciate the advantages of well-bred stock, and who go on in the old way of breeding from anything that is most convenient and cheapest. Where farmers cannot afford to purchase well-bred stock, it would cost them very little to club in and keep a good bull, a good ram and a good boar of improved blood from which to breed, taking care to select the best of the females from their flocks, and there are a sufficient number of good stallions which "stand" in all sections from which to select for service to mares. The male, particularly when he has been selected for his good points, transmits his qualities more strongly than the female, and by selecting even the best specimens of the female existing in the county, we should have distributed over the whole State stock greatly improved in value. While blooded horses have been the pride of Virginians, there are many who raise colts, breeding from the coarsest mares and coarsest stallions, particularly in the Piedmont, Mountain and Valley regions. These sections require heavier horses than the Middle and Tidewater sections, but still there should be some "blood" on one or the other side to secure a degree of activity and quickness of movement. This can be done without sacrificing the size by crossing large, well-bred stallions on good-size mares. The Percheron Norman horses and the Clydesdales are an acquisition, but we think they should be bred to moderate-size mares with some "blood" when designed for the farm.

Much progress has been made in agriculture in modern times by the use of commercial fertilizers. Indifferent and in some cases worthless fertilizers thrown on the market, too high prices charged frequently for even good fertilizers, unpropitious seasons, improper adaptations of fertilizers to particular soils and to special crops, and the failure to

follow the application of fertilizers with clover and the grasses are the principal causes which have induced many farmers to declare that "commercial fertilizers will not pay." On the other hand, we find the best farmers use these fertilizers and would not do without them. This is especially the case in the Piedmont and Valley sections of Virginia, in our trucking regions and in the cotton States where their use is annually increasing. Their use in the cotton States did not fairly commence until 1868. The largest crop of cotton before the war was in 1860—4,323,770 bales; in 1880, it was 5,737,397 bales, and in 1881 is estimated by Mr. Edward Atkinson at 6,250,000 bales. This increase is no doubt due to the use of commercial fertilizers, and this in despite of the unsettled condition of labor and the exodus of negroes from North Carolina and other States to Kansas. Three years ago the Commissioner of Agriculture of Georgia had inspected 95,000 tons of fertilizers introduced into that State, and now, no doubt, the amount is more than 100,000 tons. The cotton planters say one ton of a suitable fertilizer will produce four bales of cotton, and aver that they cannot get along without these fertilizers. North Carolina has been made a regular cotton State by their use, as they hasten maturity of the plant, and in all the State put it out of the way of frost by its early ripening. The "truckers" in Virginia declare they cannot do without these fertilizers, and their use is extending in all the trucking regions. Farmers who raise clover and the grasses recognize the importance of commercial fertilizers in enabling them to get a "stand" of these crops, and where peas are used as a green fallow, they are important in producing a good growth, particularly on thin lands. And here we may say that we think the farmers have been expending too much in purchasing nitrogenous fertilizers and have lost money in doing so, particularly in their application to wheat, which so frequently fails to produce paying crops, even under favorable circumstances, and most generally fails on thin, light lands. It has been found that clover and pea fallows will furnish nitrogen sufficient, and that fresh lands and any lands with much vegetable matter in them will do without nitrogen (ammonia), and it has been found that a mixture of fine ground South Carolina phosphate and kainit, not costing more than \$3.50 to \$4.50 per acre, will produce a good growth of peas even on thin lands, and these peas turned under will usually produce a good crop of wheat or winter oats, and that clover seeded in the following spring will generally be a success. Those who have tried it, say that if wheat or oats are seeded in the peas without fallowing and run over with a clod-crushing roller, that this will be sufficient to get them in well, and that the falling vines will answer as a mulch, protecting them from freezes. Farmers have become convinced now that the supply of putrescent manures is too small to fertilize their crops and improve their lands, and that artificial fertilizers must be resorted to. Some say that they have found their lands to be improved faster by the latter than by the former, notably among them Dr. Nichols, who owns a highly-improved farm near Haverhill, Mass. He says on one of his fields he puts putrescent manures and on which he had previously been using superphosphate of lime, and that the production fell back in comparison with that obtained from the last. He prepared his superphosphate from bone and sulphuric acid mixed on his farm. The great and increasing use made of South Carolina phosphate in the preparation of fertilizers, as well as used alone dissolved and fine ground, is an evidence of the extent of the use of artificial fertilizers, which seem steadily on the increase. Science has lent much aid in testing the value of chemical fertilizers, and it is only in modern times that the chemist, by his analysis, has been very much furthering the cause of agriculture by determining how much of valuable material any fertilizer contains. We will resume this subject in our next.

The American Farmer

"O FORTUNATUS NIMIUM SUA SI BONA NORIT
"AGRICOLAS." Virg.

PUBLISHED ON THE 1ST AND 15TH OF
EVERY MONTH.

By **SAMUEL SANDS AND SON,**
At No. 128 West Baltimore Street,

(Sign of the Golden Plow.)

BALTIMORE, MD.

WILLIAM B. SANDS, Proprietor.

SAMUEL SANDS, } Editors and Publishers.
WM. B. SANDS, }

Dr. THOMAS POLLARD, Associate Editor.
Richmond, Va., Office, 619 W. Main St.

SUBSCRIPTION:

\$1.50 a year, in advance. Clubs of five or more
will be supplied at \$1 each.

ADVERTISING RATES:

	1 Time.	1 Mo.	2 Mo.	3 Mo.	6 Mo.	12 Mo.
1 Inch 12 lines	\$1.25	\$2.25	\$4.00	\$5.50	\$9.00	\$15.00

Liberal reductions will be made on larger ad-
vertisements. Advertisements to remain on
outside page subject to special contract. Trans-
ient Advertisements payable in advance—all
others quarterly. Advertisements should reach
us by the 12th and 27th of the month, to secure
insertion in the succeeding issue.

*Subscribers who have minerals, ores, marls,
fertilizing materials, or other substances, will be
advised through our pages, by competent chem-
ists, as to their composition, uses and value, by
forwarding specimens to this office, *expressage or
postage prepaid*. Questions as to application of
chemical science to the practical arts will also be
answered.

*Persons desiring information or advice on
diseases or injuries of domestic animals, will re-
ceive replies from a competent veterinary sur-
geon, by giving a plain statement of the sym-
ptoms, etc.

At the office of THE AMERICAN FARMER
are located the offices of the following organiza-
tions, of each of which its proprietor, Wm. B.
Sands, is secretary:

Maryland Horticultural Society.
Maryland Dairymen's Association.
Maryland State Grange, P. of H.
Agricultural Society of Baltimore Co.
Also, of the Maryland Poultry Club,
Thos. W. Hooper, Secretary.

BALTIMORE, SEPTEMBER 15, 1883.

The Baltimore County Fair.

The Fair at Timonium, September 4 to 7,
was the most successful ever held there in
the number, variety and excellence of the
offerings, the large attendance and the gen-
eral satisfaction which seemed to be felt by
exhibitors and visitors. The weather was
propitious, the arrangements well devised
and well carried out.

In the cattle classes there was scarcely
so large a show as last year. Jerseys pre-
dominated as usual, but a number of those
who have heretofore taken the honors and
the largest prizes of the Society abstained,
unaccountably but apparently by concert,
from exhibiting. Their defection was partly
made up, however, by others who have not
shown before, the herds of Messrs. Carroll,
Matthews and Austen, containing some
notably fine animals, which with those of
Messrs. Robert Moore and John Ridgely,
and one of handsome but unregistered ani-
mals of Miss Nisbet, made, with some added
single specimens, a creditable showing in
this section. There were, besides these,
herds of Short-Horns, Herefords, Dutch
Friesians, Ayrshires and some natives and
crosses. The absence of the Polled Angus
cattle of Mr. Whitridge was much regretted,
those shown by him last year having by
their comparative novelty here and their
fine substance and form, created much in-
terest. It was also a matter of disappoint-
ment that the beautiful and high-priced
Jersey cattle of Mr. Samuel M. Shoemaker
were not on show, they having been sent to
the Fair of the New York State Agricultural
Society at Rochester.

The horse classes were all fairly represent-
ed, except Percherons, Mr. Walters not
showing his fine specimens as heretofore.
The sheep and swine pens were better filled
than last year and poultry display was far
larger than usual. The agricultural imple-
ment men evinced more than accustomed
energy and presented a vast array of their
several specialties and general collections,
their enterprise meeting a reward in a large
crowd of interested visitors and many sales.

Fruits and vegetables were numerous and
good, better probably than any exhibition
ever before made in the county, and the
Household department contained more speci-
mens by far of the taste and skill of the
ladies than at any previous Fair at Timonium.

The attendance was larger than ever be-
fore and the receipts were very encouraging
to the Society.

The awards on Jerseys, always a central
point of interest at this Fair, made by Dr.
Geo. A. Quinby, of Loudon county, Vir-
ginia, and Col. Amos E. Kapp, of Northum-
berland county, Pennsylvania, who per-
formed their delicate and arduous duty with
much patience and painstaking. The special
Jersey herd prize was left unawarded by the
judges, owing to a stringent condition which
not only requires females that have been in
milk to score 76 counts, and heifers not in
milk 55 counts on the Jersey Cattle Club's
scale of points, but also that the bull shall
score fifty. Mr. Robert Moore's herd led
the score, Mr. Ridgely's coming second.

In the sweepstakes for bull of either
Channel Island breed, Mr. John Ridgely's
bull King Rex carried off the honors over
Mr. Vonkapf's Normanby 2d, Mr. T. C.
Blair's Alloy 2d, Col. W. S. Franklin's
Guernsey Ashland, Mr. Austen's Hercules
of Chatsworth and Col. Matthews' Dulaney.
Mr. Ridgely had added \$25 to the Society's
prize of \$40. The same bull took first in
his class, and Dulaney 2d. In bulls between
two and three years, Hercules of Chatsworth
got first and Mr. Vonkapf's Normanby 2d,
second. In yearlings Mr. Robert Moore
got 1st on Ion, and Mr. T. C. Blair second
on Alloy 2d. On aged cows Mr. Robert
Moore took both 1st and 2d on Maid of St.
Mary's and Emegarde 6th. He and Col.
Matthews tied on two-year old heifers and
the two prizes were equally divided. The
same gentleman carried off first and second
respectively on yearlings, and Mr. Ridgely
first on calves.

In the unregistered Jerseys, Miss Nisbet
took the Herd and most of the other prizes.

Capt. E. Herman, manager of the Shep-
herd Asylum farm, took all the prizes in
Short Horns; Mr. E. Gittings Merryman,
those on Herefords; Dr. F. W. Patterson on
Dutch Friesians, and G. Albert Mays on
Ayrshires.

In the butter competition, referred to else-
where in this issue, Miss M. Morgan took
first on fresh roll, and E. A. Coskey second
on that and first on roll two months old.
On fresh butter in prints, F. Sanderson took
first and Miss Morgan second.

Three pounds of roll and three of print
butter made by a boy or girl under sixteen
years were awarded—the first prize, \$30,
went to Miss Florence W. Matthews (daugh-
ter of W. W. Matthews, a member of the
Gunpowder Farmers' Club), and second, \$12,
to Master Harry Greason. The special prem-
ium \$10, for best bound of butter in the fair
one week old, went to Mrs. M. A. Worley.

MARYLAND JERSEYS.—Mr. S. M. Shoemaker's
Burnside Park Herd of Jerseys ap-
pears to have carried everything at the New
York State Fair, including the gold medal
for herd, first and second on cow, first on
aged and yearling bulls, and first on heifer.
St. Clementaise, the imported cow, of which
a portrait was recently given in the FARMER,
took first prize, beating Oxford Kate which
took second.

Death of Edward Stabler.

We had occasion a few weeks ago to an-
nounce the death of an old friend and con-
tributor to the pages of the AMERICAN
FARMER, Col. J. W. Ware, one of the best
known and most excellent farmers of Vir-
ginia, and we have now the melancholy duty
of chronicling the death of another of our
ablest farmers and agricultural writers, ED-
WARD STABLER, of Montgomery county,
Md., a personal friend of some forty or more
years, whose death took place at Sandy
Springs on the 4th of September in the 89th
years of his age. Mr. Stabler has occupied
the position of postmaster at his late resi-
dence for a half century, and, in addition to
the duties pertaining to that office and his
management of his farm, he was also en-
gaged in the art of engraving; and in a
biography published in the Baltimore *Ame-
rican*, it is stated that he had a decided talent
for his calling, "and although entirely self-
taught, he became very expert as an engra-
ver, and built up a large and profitable busi-
ness in this line. He had the presses for the
seals and dies made in his own shop at Hare-
wood—the die-sinking in cast-steel and seal-
engraving in steel and bell-metal, all being
done by his own hands. His seals and
presses for State and city governments, cor-
porations, courts of law—both State and
county—were widely circulated throughout
the country. He also furnished the various
departments of the national government at
Washington with seals, and made presses,
and some of the seals for the United States
consular agents all over the world. The
steel dies for striking the gold and silver
medals of the Maryland Institute were made
by him some years since."

Mr. Stabler was perhaps best known in
this and other of the Middle and South-
ern States as an agricultural writer, having
received, some thirty years ago, the prize of
\$50, offered by us for the best essay on the
"Renovation of Worn-out Lands," which had
a wide circulation, and was offered at a time
in the history of our State when its agriculture
was in a very low condition. Discussions had
taken place in the pages of the AMERICAN
FARMER between Cols. Capron and Carey
and Messrs. Calvert and Roberts on subjects
connected with that for which our prize was
offered, and a great impetus was given to
the improvement of the agriculture of a
number of the old States by the practical
teachings of these writers. His biographer
says:

"Mr. Stabler, with very small means
and in feeble health, commenced farming un-
der the most adverse circumstances, but by
strict economy and great industry and energy
he brought what was once an utterly
worn-out farm, as poor as any land in Mary-
land, to the highest state of cultivation. He
is known as one of the most advanced agri-
culturists in this country, and his prize es-
says on the "Renovation of Worn-out Lands,"
also on "Under Draining" and "Drill Hus-
bandry," and other topics, gave him national
reputation. These papers were published in
the *American Farmer* and extensively copied
by the press throughout the country. The first
prize for the "Best Essay on the Renovation
of Worn-out Lands" was awarded to him
by the publisher of the *American Farmer*—
Samuel Sands, Esq.—in 1848, in competition
with a number of distinguished Marylanders.
The other two essays also drew the first prize
offered by the Maryland State Agricultural
Society—one in 1848 and the other subse-
quently. The first named essay was repub-
lished in the *American Farmer* within the
past two years."

The death of his estimable wife, in May,
1882, was the first break by death in the
family circle during a period of fifty-nine
years. He left ten children—all of whom
are now living—viz: Margaret S., married to
James S. Halliwell, a prominent agricultur-
ist near Brookville, Md., and formerly pro-
prietor of the Alexandria (Va.) Female Sem-
inary; Catharine and B. Gilpin, both un-
married, living at the old homestead; Philip
T., living near Sandy Spring, a well-known
farmer and business man; Samuel J., an at-

torney-at-law, living in Yuba City, Cal.;
Louis C., of Kansas City. The youngest,
Arthur, lives at "Harewood," and farms the
ancestral estate. Three of the sons reside in
Baltimore—Alban G., formerly connected
with the Baltimore and Ohio and Pennsyl-
vania Railroads; Edward, Jr., the well-known
coal merchant in the Sun Building, and Jordan,
a leading grocer, corner of Eutaw and
Madison streets.

Mr. Stabler was a member of the Society
of Friends, as were his ancestors since 1680,
as is shown by the record of the family. Mrs.
Stabler's ancestors, the Gilpins and Thomas-
es, have also been members of that religious
denomination for the past two hundred years.

MESSRS. FRANKLIN DAVIS & Co's nur-
series at Baltimore and Richmond are the
largest in extent, with perhaps a single ex-
ception, of any in the country, so that a
typographical error in their advertisement,
which made the land in nursery stock one
instead of four hundred acres greatly under-
rated their extent.

THE CHAIRS PEACH.—We were recently
shown some very fine specimens of this fruit,
advertised by Messrs. Wm. Corset and Son.
They are a large sized, handsome yellow
fleshed peach, and will extend the packing
season. The trees are said to be very pro-
lific.

AUTOBIOGRAPHY OF BENJAMIN HALLO-
WELL. "Written at the request of his
daughter, Caroline H. Miller, for his chil-
dren and grandchildren; in the seventy-
sixth year of his age." Published by The
Friends' Book Association, Philadelphia,
and to be had by addressing Miss Alice
Halliwell, Brookville, Montgomery Co.,
Md. Price \$1.65, which includes postage.

The relations of the writer of this autobi-
ography to many still living were such as
will render it to them a sacred volume, and
it will be little less so to the descendants of
his contemporaries with whom he was in
any way associated. Wherever his name
was known it was honored as that of a man
of boundless sympathy, fine abilities and
wonderful energy.

Although best known as an educator he
stamped his name upon the history of his
times as an eminent mathematician, a keen
observer of public events, and an earnest
mover in all that concerned the public wel-
fare. Personal interests were always sub-
servient to the call of duty, whether to his
fellow-beings or to his country, and therefore
his chief riches lay in his honored name.

The book is given to us in the plain lan-
guage of the Society of which he was a mem-
ber, and in the simple, unembellished style
characteristic of the great and good man
who wrote it. The lessons of steady persist-
ence in what he conceived to be right, under
any and all discouragements, and the strict
rules of integrity which throughout kept
him above temptation to swerve to the right
or left therefrom, are unconsciously given in
every chapter of his life. These are the
"foot-prints" that made his life sublime, and
which the men and boys of this or any other
age will be the better for recognizing, and
which will prove a richer heritage to his de-
scendants than any amount of "filthy lucre."

Wool Growing.

An account of the wool industry published
in America states that during the last four
census years the number of sheep and pro-
duction of wool were returned as follows:

Census years.	No. of Sheep.	Lbs. of Wool.
1850.....	21,729,230	82,616,989
1860.....	22,471,225	60,294,913
1870.....	28,477,931	100,103,267
1880.....	43,576,899	235,648,534

The increase in the number of sheep in the
decade from 1850 to 1860 was only 748,055,
equivalent to 3½ per cent; but from 1860 to
1870 it amounted to 6,006,675, or 27 per
cent.

Home Department.

Family Chronicles.

When representatives of former generations tell us tales of their youth they rarely fail to have interested listeners; indeed it is one of the special treats of children of every age to listen to their parents and grandparents' recitals of their habits and doings when they were young. And yet these interesting legends are very seldom preserved.

We doubtless think as we hear them uttered that our memories will hold that which so interests us for future use or entertainment, but so unreliable are the memories of most of us that much that we would regret to lose escapes us, and what is retained becomes more or less mixed, so that if we attempt to hand it down to another generation it becomes very unreliable history.

Had any one among our ancestry taken the pains to preserve to us some connected record of the family interests and connections, we would value it now beyond almost any volume money could procure; therefore we may know that any painstaking of that kind will be appreciated by our posterity.

How easily might this be done! In almost every family—certainly within the range of near relationship—there is one member who is more apt in such things than the rest; let him or her be distinguished as the family historian, and be provided with the requisite conveniences for keeping a clear and continuous record of all that transpires, whether it reflects special honor or otherwise, and of the variations in the ties of relationship by marriage—of the migrations to other parts of the world—of the manners and customs common to the age, and anything else which our interest in the past shows us might interest those to come. This should be open to the inspection and suggestions of all the circle of relations to be valuable and satisfactory, and the one who undertakes it should be made to feel that the work is appreciated in order to keep the interest from flagging.

Much that would enter into a record of this description will of course enter into the public records, but unless a lawsuit calls for it people seldom go to such records for information, and if they should it would puzzle even the historic "Philadelphia lawyer" to make it fit together; and what would such dry facts when gathered be compared with the same sandwiched into a narrative of correlative events.

Let us then give to our children and grandchildren to the remotest generations what we so covet for ourselves, and for which we would be so grateful had it been provided for us in the past.

CERES.

How to Show Love for a Wife.

Show love for your wife and your admiration of her, not in nonsensical compliment; not in picking up her handkerchief, or her glove, or in carrying her fan; not, though you have the means, in hanging trinkets and baubles upon her; not in making yourself a fool by winking at, and seeming pleased with her foibles or follies or faults; but show them by acts of real goodness toward her; prove, by unequivocal deeds, the high value you set on her health, and life, and peace of mind; let your praise of her go to the full extent of her deserts, but let it be consistent with truth and with sense, and such as to convince her of your sincerity. He who is the flatterer of his wife only prepares her ears for the hyperbolic stuff of others. The kindest appellation that her Christian name affords is the best you can use, especially before her face. An everlasting "My dear" is but a sorry compensation for want of that sort of love that makes the husband cheerfully toil by day, break his rest by night, endure all sorts of hardships, if the life or health of his wife demand it. Let your deeds, and not your words, carry to her heart a daily and

hourly confirmation of the fact, that you value her health, and life, and happiness beyond all other things in the world; and let this be manifest to her, particularly at those times when life is always more or less in danger.—Selected.

A Large Yield of Wheat in Dorchester.

Danville, September, 1883.

Messrs. Davison & Co.

Gentlemen: When I was up to purchase my fertilizers you asked me to give a statement of how I prepared my land last year for wheat that I raised 50 bushels per acre. I flushed up 10 acres of stubble that I had raised 33 bushels per acre the year before with your fertilizer. The land is a yellow clay soil, after flushing I rolled and used cultivators on it, then sowed 200 pounds per acre of your "High Grade" Superphosphate broadcast, then drilled 1½ bushels wheat per acre, it is a new variety I got from the Patent Office three years ago, smooth head, red, long berry, as forward as the Fulse, and stand the winter better than any I have ever seeded. I grew 500 bushels on 10 acres. I think your fertilizer is the very thing for farmers in this section, the clover the largest I ever had.

Yours, &c.,

L. P. SKINNER.

Danville, Dorchester Co., Md.

Ayer's Ague Cure not only affords immediate relief, but it eradicates the malarial poison which produces the disease, without leaving any injurious effect, as is the case with quinine and many of the ague medicines advertised. It is the only medicine in existence which may be considered an absolute antidote for fever and ague, and kindred diseases.

Ayer's Hair Vigor promotes the growth, and improves the beauty of the hair. It imparts an attractive appearance, a delightful and lasting perfume. While it stimulates the roots, cleanses the scalp, and adds elegance to luxuriance, its ingredients are harmless and its effects are enduring; and thus it proves itself to be at once the best and cheapest article for toilet use.

NEW PARLOR ORGAN ONLY \$35.00

Including Stool, Book, and Music, providing order is given and remittance made within seven days from date of this newspaper. **REGULAR PRICE, \$65.00**, without stool, book, and music. The **PARIS, LONDON, and NEW YORK ORGAN** is built expressly to supply every household throughout civilization with organs at popular prices. It is the best of its kind for the Parlor, Lodge, Church, or Sabbath School, and is an ornament for the parlor of the millionaire, workingman, or the far away Western farmer, &c. **BRIEF DESCRIPTION**, New Style, No. 700: Height, 59 inches; Length, 41 inches; Depth, 23 inches; Weight, 150 lbs.

FIFTEEN (15) USEFUL STOPS, NAMELY:

1. **POWERFUL BOX SUB-BASS**.
2. **DOUBLE OCTAVE COUPLER**, which doubles the power of the Organ; Couples Octaves Right and Left.
3. **VOIX CELESTE**. Opens set Three Octave Reeds, giving very charming, sweet, melodious tone.
4. **FRENCH HORN**. Imitates a full Orchestra and Brass Band.
5. **DIAPASON**. Opens five full Octaves new and original "Paris" Reeds.
6. **DULCIANA**. Powerful five Octaves Golden Reeds are thrown open by this Stop. Tone, "London" Style.
7. **VOX HUMANA**. Tremulant. Which imitates by a FAN the human voice.

8. **SAXAPHONE**, 9 Piccolo, 10 Eolian, 11 Clarinet, 12 Cello, 13 Vox Jubilante, 14 Clarion, 15 Grand Organ. The last eight stops are operated in direct conjunction with above seven, bringing forth, at command of the performer, most charming music, with beautiful orchestral effects, from a mere whisper, as were, to a grand burst of harmony. Its **THUNDERING TONES**, while using the full Organ, must be heard to be appreciated.

This original Cabinet Organ contains **FIVE SETS GOLDEN TONGUE REEDS** as follows: 1st, Five (5) Octave Set Diapason or Paris Reeds. 2nd, Five (5) full Set Dulciana Reeds toned "London" style. 3d, Sweet Vox Celeste Reeds of Three full Octaves. 4th, One (1) Full Octave Powerful Manual Boxed Sub-Bass Reeds. 5th, Two (2) Octaves or one each of Piccolo and Saxophone Reeds combined. The above Five Sets of Reeds are entirely original and are covered by Patents obtained at the UNITED STATES PATENT OFFICE. This beautiful Pianoforte Upright Parlor or Cabinet Organ contains Five Full Octaves, One Manual or Keyboard, Handsome Walnut Case, Reception for Book and Sheet Music, Lamp Stand, Handies, Rollers, Treble Upright Bellows, immense power, Steel Springs, &c. Right Knee Swell, &c. Left Grand Organ Knee Swell, by which the full power of this Organ may be obtained at pleasure by use of the knee without removing the hands from the Keyboard.

A MID-SUMMER OFFER.—I desire every home within the reach of civilization to possess one of my matchless Organs and to this end only I make this offer. **A \$65.00** Parlor Organ with Book, Stool and Music, complete boxed, **\$35.00** delivered on Cars at Washington, New Jersey, FOR ONLY **\$35.00**.

Providing Offer is accepted and order given within Seven Days from date of this Newspaper.

CLIP THE FOLLOWING NOTICE AND MAIL WITH ORDER, AT No. 111.

Upon receipt of this Notice from any reader of the **AMERICAN FARMER**, together with only **\$35.00 CASH**, by P. O. Money Order, Registered Letter, Check or Bank Draft, mailed within the limited time as specified, I hereby agree to receive same in full payment for one of my Beatty Organs, New Style, No. 700, &c. Money refunded with interest at 4 per cent. from date of your remittance if it is not as represented after one year's use.

Remember, to secure this **GREAT BARGAIN**, you should order at once before the limited time has expired. Nothing can be gained by long correspondence. My sole object is to have this popular organ introduced, without a moment's delay, into every household throughout civilization, as early and as quickly as possible. I am willing to offer the first instrument as a sacrifice to introduce it, and every one sold so far has sold others. In one particular instance thirty sales, at \$65 each, have followed the first organ purchased. First Organ is shipped at **\$35.00** as an advertisement. All I ask in return of you is to show the instrument to your circle of friends. The instrument speaks for itself. It sings its own praises. If you are unable to accept this Great Offer, write me your reason why. Perhaps you have an instrument already of some other make and are not pleased. If so, dispose of it and order this. A friend of yours may desire an organ. Call their attention to this advertisement. If they are from home, mail them the notice. If you can conveniently help me extend the sale of these Popular Instruments, I shall certainly appreciate your efforts. Shipments of Beatty's Organs, Church, Chapel, and Parlor (this does not include Beatty's Pianofortes), during the past seven months were as follows: December, 1882, 1,115; January, 1883, 1,100; February, 1883, 1,115; April, 1883, 1,115; May, 1883, 1,100; JUNE, 1883, 1,000. **TOTAL, \$441.**

If you are in need of an Organ, you should avail yourself of the above offer at once, as it will not be repeated. Let me hear from you anyway. (Beware mind, that I will not deviate from the above offer.) **ORDER IMMEDIATELY.** Address or Call upon: the Manufacturer,

DANIEL F. BEATTY, Washington, New Jersey.

Marvelous—How wonderfully popular J. M. Laroque's Anti-Bilious Bitters is with the people, and how quickly Dyspepsia, Headache, Constipation and all forms of Liver Disease yields to its influence. 25 cents a paper; \$1 a bottle. W. E. Thornton Baltimore and Harrison Streets.

Baltimore Markets—Sept. 15.

Live Stock—Beef Cattle. The market is a little more active to-day than last week, but at a slight decline, as compared with the prices ruling then. Prices of Beef ranged as follows: Best, \$5.25@5.35; that generally rated first quality, \$4.50@5.25; medium or good fair quality, \$3.50@3.87½; ordinary thin Steers, Oxen and Cows, \$3.25@3.35; extreme range of prices \$3.00@6; most sales were from \$3.75@5.12½ per 100 lbs.

Swine.—The run was much larger than last week, with no improvement in the demand. Price ¼c. lower. We quote common Hogs at 6@6½ cts., and better grades at 7½ cts. per lb.

Sheep and Lambs.—There has been no outside demand and the butchers bought sparingly, making a dull market. Stock Sheep have been fairly active. We quote butcher Sheep at 3@3½ cts., and Lambs at 4@4½ cts. per lb. gross. Stock Sheep, \$2@3.50 per head, for Ewes and wethers, 4@4½ cts. per lb.

Tobacco—Leaf.—We report Maryland in active demand for all desirable grades, and notice some inquiry recently for the common also. We quote: Maryland inferior and frosted, \$1.50@2.50; do. sound common, \$3.00@4.00; do. good common, \$4.00@5.00; do. Middling, \$6.00@8.00; do. good fine red, \$8.00@10.00; do. fancy, \$10.00@12.00; upper country, \$4.00@15.00; do. ground leaf, \$2.00@7.00. Ohio remains quiet but firm; the active demand for spangled continues, with sales of about 50 hhds. We quote inferior to good common, \$3@5; greenish and brown, \$5.50@7.50; medium to fine red, \$7.50@10; common to medium spangled, \$6@9; fine spangled and yellow, \$10@15; air-cured common, \$4@6; air-cured medium to fine, \$7@15.

Flour.—The moderate demand is only to supply immediate wants of local dealers, and the market is dull and fairly steady, with prices well controlled offering. We quote as follows: Howard street and Western Super, \$3.00@3.75; do. Extra, \$4.00@5.00; do. family, \$5.25@6.00; City Mills Super, \$3.00@3.75; do. Extra, \$4.00@4.75; do. (Rio Brands) Extra, \$6.00@6.25; Baltimore Winter Wheat Patent, \$7.50; do. High Grade Family, \$6.75; do. Second Grade Extra, \$6.50; do. Third do. do, \$6.25; Fine, \$2.75@3.00; Rye Flour, \$3.75@4.00; Corn Meal, per 100 lbs., \$1.30@1.35.

Wheat.—The market for Southern Wheat is dull and lower, with slow inquiry. Good to choice samples are quoted at \$1.07@1.09 for Fultz and \$1.11@1.15 for longberry. Common to tough parcels ranged from 95¢ to \$1.03. Western Wheat ruled fairly active but weak and lower, and closed easy at the lowest prices of the day. The closing quotations were as follows: Spot No. 2, \$1.08@1.08½; September, \$1.08@1.08½; October, 1.09@1.10½, and November, \$1.12½@1.12¾.

Corn.—The supply of Southern Corn continues light and the market is firm, under a fair inquiry. Old grades of white sold at 89¢, good to prime yellow at 64¢. There is very little disposition to do business in Western Corn and the market is dull and nominal. The closing prices were: 88@89 cts. for spot; 89 cts. for September; 60 cts. for October, and 59@60 cts. for November.

Oats.—There is a fair demand, but the supply is ample and the market is steady. We quote Maryland and Pennsylvania at 33@40 cts.; mixed Western, 33@36 cts.; bright do. 36@38 cts.

Rye.—The market is quiet and steady with better supply and fair inquiry. Sales 100 bushels choice Maryland at 67 cts., and 600 prime at 63 cts.

Provisions.—Speculative trading is dull and the market is irregular and generally lower. For job lots the local market is fairly active and steady. Packed lots from store are quoted as follows: Bulk shoulder 7½ cts.; clear-rib sides, 8 cts. Bacon shoulders, 8 cts.; clear-rib sides, 9 cts. Hams—Sugar-cured, 13½@16½ cts. Refined Lard, in tierces, 10½ cts. Mess Pork—New heavy, \$14.50 v bbl.

Butter.—Choice fresh stock is in quick demand, and the market is firm and higher under light receipts. Medium and low grades are dull and nominal. We quote choice New York State at 23@25 cts.; fresh Western choice at 18@20 cts.; do. good to prime at 14@16 cts., and near-by receipts at 16@20 cts. v b.

Eggs.—The market is fairly active and firm at 21@22 cts. v dozen, the latter for choice near-by stock.

FARMERS

who are interested in
Growing Crops
cheaply and successfully

should write us for our pamphlet on pure fertilizers. **A good fertilizer can be made at home for about \$12 a ton by composting with POWELL'S PREPARED CHEMICALS.** References in Every State. **Agents wanted for unoccupied territory. Apply with references.**

BROWN CHEMICAL CO.

Manufacturers of

Powell's Tip-Top Bone Fertilizer,

Bone, Potash, Ammonia, &c.

18 LIGHT STREET, BALTIMORE, MD.

For Sale—Fertilizers.

500 TONS HAIR MANURE,

Genuine Plant Food, the best and cheapest fertilizer in the market, at \$4 PER TON in bulk, at our Hair Factory, Frederick Road, Baltimore.

WILLIAM WILKINS & CO.

300½ West Pratt Street.



FRANKLIN DAVIS

EDW. H. BISSELL

BALTIMORE NURSERIES.

FRANKLIN DAVIS & CO.

400 Acres in Nursery Stock. 100 Acres in Orchards. 100 Acres in Small Fruits.

WE offer to our customers an immense stock of APPLES, PEACHES, CHERRIES, APRICOTS, GRAPES, &c., all the standard sorts. Also the new varieties of FRUITS, ORNAMENTAL TREES, SHRUBS, ROSES, &c. Wholesale and Retail. To dealers we can offer stock on favorable terms, and the best facilities for packing and shipping. Catalogues mailed on application.

FRANKLIN DAVIS & CO.

Office Cor. Baltimore and Paca Sts. (over People's Bank.) BALTIMORE, MD.

SAUL'S NURSERIES.

WASHINGTON, D. C.

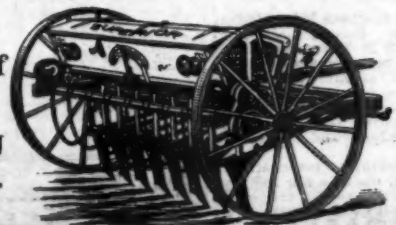
THE undersigned offers a fine stock of the following: New Pears, New Peaches, New Cherries, New Grapes, New Strawberries, &c. Fruit Trees of all kinds. An extensive stock, viz: Plums, Cherries, Apricots, Apples, suitable to the South, &c. Grape Vines, Strawberries, Raspberries, &c., new sorts Evergreens, New Ornamental Trees, New Shrubs, &c., Small sizes, suitable for Nurserymen, as well as large stock in great variety. DUTCH BULBS—Large importations direct from the leading growers in Holland. First quality Bulbs, Hyacinths, Lilies, Tulips, &c. New and rare Greenhouse Plants, Winter Blooming Plants. NEW ROSES—Bennett's Hybrid Tea, Queen of Bedders, New French and English Roses, &c. Everything at low rates. Catalogues mailed to applicants.

JOHN SAUL, Washington, D. C.

THE SUPERIOR GRAIN DRILL

Greatly Improved for the Season of 1883.

No change of Gears.
No bunching of the Grain.



Simple,
Strong,
Durable.

The "SUPERIOR" will be furnished this Season with the "MARK'S FERTILIZER FORCE FEED," as well as our OLD RELIABLE FERTILIZER ATTACHMENT. The "SUPERIOR" is now offered to the public with

A Force Feed Grain Sower, A Force Feed Grass-Seed Sower, and A Force Feed Fertilizer Attachment.

And, from the reputation it has so justly earned, it is fully entitled to the name of "SUPERIOR." Send for Circular and Price List. We also have the Stover Corn and Cob Mill, the only Geared Sweep Mill in the Market. Also Buckeye Cider and Wine Mill and Agricultural Implements generally. Send for descriptive Circular and Price List.

J. C. DURBOROW & CO.,

35 LIGHT STREET, BALTIMORE, MD.

PEACH AND APPLE TREES.

10,000 first-class 2 and 3 year old APPLE TREES, in unbroken block, largely Smith, Cider and Ben Davis, at \$13 per 100.
50,000 PEACH TREES, 4 to 6 feet, \$30 per 1,000.
100,000 Extra strong 1 and 2 year old ASPARAGUS ROOTS.
All the best STRAWBERRY PLANTS, new and old popular varieties, Manchester, Nigh's Superb, James Vick, Legal Tender, Big Bob, etc., etc.
Large Stock Shade and Ornamental Trees. Send for Catalogue. S. E. ROGERS & SON, Mt. Holly, N. J.

FOR SALE:—Pure South Down Ram Lambs and Shearings bred of and from the Celebrated "Druid Hill Park" Flock. For particulars and Pedigree, address,

WM. H. GREENWAY,
No. 31 W. Biddle Street, Baltimore, Md.

Gould's Razor-Edge Butcher Knives

ARE Refined, Solidified and Tempered by an entirely NEW PROCESS. Every Knife is warranted to Whittle Hard-seasoned Hickory and retain an Edge that will take a hair or shave a man's beard with as much ease as a first-class Razor. Every Knife is warranted to give entire Satisfaction, or the money paid for it will positively be returned. A Sample Knife sent by mail (Post-paid) for \$1. Hundreds of Testimonials with References, Price List, etc., free. AGENTS WANTED. Address,

J. H. GOULD,
Atwater, Ohio.

Cut This Out & Return to us with TEN CTS. & you'll get by mail a GOLDEN LOT OF GOODS that will bring you in MORE MONEY, in One Month, than anything else in America. Absolute Certainty. Need no capital. M. Young, 173 Greenwich St., N. York.

THE ANNUAL SALE OF REGISTERED SHORT HORN CATTLE will take place at ROSE HILL STOCK FARM, about half mile from Rapidan Station, Va., (Va. Midland Railroad) THURSDAY, September 20, 1883.

The sale will be conducted by Col. L. P. MUIR, Secretary of American Breeders' Association, Chicago. There will be 29 females and 8 bulls of the most fashionable families. There will also be sold a select flock of pure-bred COTSWOLD SHEEP and a few select well-bred COLTS. The splendid Stallion "CANTON," by Jay Gould, will be added.

For catalogue address the Proprietor,
O. F. BRESEE, Baltimore, Md.

WATER-PROOF BUILDING MANILLA

This water-proof material resembles fine leather, is used for roofs, outside walls of buildings, and inside in place of plaster. Catalogue & W. H. FAY & CO., N. J.

BEST MARKET PEAR.

99,999 PEACH TREES All best varieties of new and old Strawberries, Currants, Grapes, Raspberries, etc.

EARLY CLUSTER
New Raspberry, early, hardy, good. Single hill yielded 13 quarts at one picking. Send for free Catalogue. J. A. COLLINS, Moorestown, N. J.

All the benefits of driving springs of water or water works can be obtained by Farmers, Dairymen, or Florists, Gardeners or Private Residences. Over 3000 in New York.

11 YEARS' EXPERIENCE.
Self-Regulating, Strong and Noiseless
WIND MILL!
Water delivered from springs or deepest wells to 1 point or a dozen. Skilled mechanics do all our work. Write for lithographs, etc. B. S. WILLIAMS & CO., 317 Arch St., Phila., Pa. Works at Kalamazoo, Mich. Rochester, N. Y.

ESTABLISHED 1839.

JOHN BULLOCK & SON,

MANUFACTURERS OF

PURE BONE DUST AND DISSOLVED PURE RAW BONE,

Store, No. 71 SMITH'S WH'F. Factory, WASHINGTON ROAD.

Also Agents for the Sale of

ROSENDALE, ROUND TOP AND PORTLAND CEMENTS.

TO WHEAT GROWERS!

The undersigned, PIONEER in the manufacture of Fertilizers in this city, and ORIGINATOR in 1838 of the Formulas and processes of manufacture of "EXCELSIOR" & AMMONIATED PHOSPHATE, So well and favorably known by the Agricultural public, relying upon his experience and personal reputation hitherto acquired in the uniform excellence of these Fertilizers, as manufactured by him, continues to offer them to the Farmers and Planters of Maryland and Virginia, with the assurance that the high standard quality of each will be maintained as heretofore.



AND



For growing Wheat, it is the universal opinion of the farmers of Maryland and Virginia, after over twenty years experience in the use of these FERTILIZERS, that an application of 100 pounds is equal in its effects to 200 pounds of any other Fertilizer or Guano, therefore fully 50 per cent. cheaper.

With my present advantages and superior facilities for manufacturing, I challenge competition with any Fertilizer sold in the United States, in Quality, Mechanical Condition and Price. By strictly adhering to my Original Formulas, using only the most concentrated materials, and superintending in person their manufacture—as for the past TWENTY-FIVE YEARS.

UNIFORM QUALITY IS GUARANTEED.

Farmers, to secure the ONLY GENUINE EXCELSIOR AND PHOSPHATE, should see that every Bag is branded as above, with the ANALYSIS and MY NAME IN RED LETTERS.

J. Q. A. HOLLOWAY,

107 McELDERRY'S WHARF, BALTIMORE, MD.

SEED WHEAT!

NEW VARIETIES OF GREAT PROMISE!

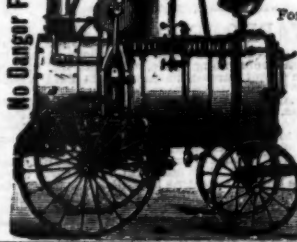
HYBRID MEDITERRANEAN—Cross between DIBBY and RED MEDITERRANEAN, combining the hardiness and prolificacy of the former with the sowing quality of the latter. Bearded, red chaff, with seed just winter better than Clawson. Have counted 72 heads on one stool. DOES NOT MUST. Price, \$15.00 per bushel, \$4.00 per peck (not prepaid). \$1.00 per pound, prepaid.

MARTIN AMBER—Has taken FIRST PRIZE THREE TIMES at Pennsylvania State Fair. Bushel, 36; peck, 32; 3 lbs., \$1. Also pure strains of Velvet Chaff, Clawson, Fultz, Red Mediterranean, etc. \$2 to \$3 per bushel.

HIRAM SIBLEY & CO., ROCHESTER, N. Y. CHICAGO, ILL.

PATENT Return Flue BOILER.

NO EXPLOSION. "THE HUBER" ENGINE



For COTTON GINS, RICE THRESHERS and PLANTATION MILLS has no equal. Economy, Safety and Durability combined. Boiler of the best plate and highest tensile strength. Engine the latest and best design. Special features patented; every part perfect. All modern improvements. Every ENGINE a model. Fully tested; warranted to give satisfaction or money refunded with 6 per cent. interest. Sold direct from first hands, saving customers from two to four profits.

6 H. P.	\$600.00	12 H. P.	\$750.00
8 H. P.	\$650.00	14 H. P.	\$800.00
10 H. P.	\$700.00	16 H. P.	\$850.00

Rice Threshers and Plantation Locomotives at corresponding prices. Send for Catalogue No. 10 giving full details.

Huber Manufacturing Co., Marion, Ohio.

AN HONEST OFFER.

If you are sick or ailing, no matter what your complaint, write to us and we will send you ON TRIAL one of our large ELECTRIC MEDICATED PADS to suit your case, provided you agree to pay for it if it cures you in one month. If it does not cure you it costs you nothing to try it. Different pads to cure Dyspepsia, Rheumatism, Liver and Kidney Diseases, Piles, Lung Diseases, Asthma, Catarrh, Lame Back, Ague, and many other diseases. Marvelous cures being daily made in cases where all other treatments have failed. Prices very low. Remember these are not little medals, but large Pads made of Roots and Herbs, combined with Electricity. We do not ask you to buy them blindly, but merely to try them at our risk. Book, giving prices and full particulars, free. Address at once



ELECTRIC PAD MANUFACTG CO., 580 Atlantic Ave., Brooklyn, N. Y.

LANDRETH PEDIGREE SEEDS!

THE U. S. MAIL BRINGS US TO YOUR DOOR!

The most extensive Seed Growers in America. Founded 1781. Drop us a Postal Card for our PRICED CATALOGUE. Address simply LANDRETH, PHILADELPHIA.

GEORGE PAGE & CO. MANUFACTURERS,



No. 5 NORTH SCHROEDER STREET, BALTIMORE, MD.

PAGE'S PATENT PORTABLE STEAM ENGINES. PAGE'S PATENT PORTABLE CIRCULAR SAW MILLS, GRIST MILLS, SHAFING AND PULLEYS. B. S. BENSON'S TRACTION ENGINE AND PLOWS, will plow land at the rate of 10 acres per hour and at less than 25 cts. per acre. NICHOLS, SHEPHERD & CO. VIBRATOR THRESHING MACHINES. Send for Catalogue and Price List.

LUMBER.

THOMAS MATTHEWS & SON,
88 N. High St. and Cor. Canton Ave. and Albemarle St., Baltimore.

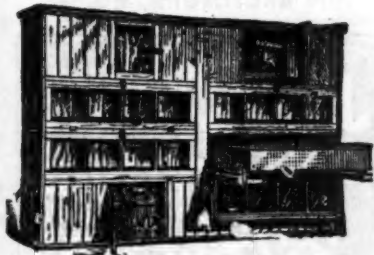
White Pine and Yellow Pine LUMBER, for Building.
Rough and Dressed Lumber.

HARDWOOD FOR WHEELWRIGHTS AND CABINET-MAKERS.
SHINGLES, LATHS, PALES, Etc., AT LOWEST PRICES.

MAKERS OF FINE JERSEY BUTTER.

RICHARD GOODMAN JR., Lenox, Mass.
A. W. CHERRY, Agt. N. E. Farmer.
J. MILTON MACKIE, Pres. Am. Jersey Cattle Club.
HENRY STEWART, Dairy Ed. Am. Agriculturist.
EDWARD BURNETT, Deerfoot Farm, Southboro.

All Use and Recommend



THE FERGUSON BUREAU CREAMERY.

Especially adapted for fine Jersey Dairies.
It develops the finest flavor and color. The butter has the best grain, and keeping quality.
It makes the most butter. Uses the least ice, and saves the most labor.

Hundreds have discarded deep setters and adopted the Bureau.
DON'T BUY ANY CANS, PANS OR CREAMER, or send your milk to the factory, until you have sent for our large illustrated circulars and price lists.

THE FERGUSON MFG. CO. Burlington Vermont.

MARYLAND AGRICULTURAL COLLEGE,

Situated in a beautiful and healthy locality, eight miles from Washington, D. C., on Baltimore and Ohio Railroad. The instruction embraces a full College Course, including Scientific and Practical Agriculture, with a full corps of professors. Terms for the course of nine months, commencing 20th September, including board, tuition, fuel, lights and washing, \$300.

BOARD OF TRUSTEES.—Governor William T. Hamilton, president; Hon. Geo. H. Williams, President of the Senate; Hon. Otis Keith, Speaker of the House; Hon. C. J. M. Gwynn, Attorney General; Hon. Barnes Compton, State Treasurer; Hon. Thomas J. Keating, State Comptroller; Hon. George B. Loring, U. S. Commissioner of Agriculture; Allen Dodge, Esq., Hon. Ezra Whitman, Hon. John Carroll Walsh, F. Carroll Goldsborough, Esq., Hon. Wilnot Johnson.

For full particulars send for Catalogue. Postoffice address, A. J. SMITH, President, College Station, Prince George's County, Md.

PEACH TREES.

WE are prepared to make low rates on large lots for Fall Trade. THOSE WANTING 5,000 to 10,000 WILL PLEASE CORRESPOND WITH US. We have BARTLETT and KIEFFER PEAR, CHAMPION and ORANGE QUINCE, REED PLUM, APPLE and CHERRY TREES, and SMALL FRUITS in great variety.

DAVID BAIRD & SON,
Manalapan, N. J.

Jersey Red Pigs

From largest herd South which took Eight Premiums and great sweepstakes as finest herd in Virginia at State Fairs, 1881-'82. This hog is free from disease, a natural grazer, prolific and early to mature, and in the Western markets brings a higher price than any other breed.

T. LOVELOCK, Gordonsville, Va.

Cotswold Sheep For Sale

Thoroughbred Yearling Rams and Ram Lambs, sired by imported "Baron Thame," of 25 lb. fleece; Baron Gillet and other fine rams; also ewes, to be bred the coming season, at reasonable prices.

EDWARD C. LEGG,
KENT ISLAND, MD.

MARTIN AMBER WHEAT.

This new variety has again proven its superiority over older varieties by its enormous yield. Fine quality of Grain and Flour, and the fact that with ordinary cultivation it only requires 1/2 Bushels of Seed to produce TWENTY-FIVE to FORTY Bushels per acre. Price, by Express, 1 peck \$2.00, 1/2 bushel \$3.00, 1 bushel, enough for 1 acre, \$4.00, 1 bushel \$5.00. Prepaid, 1 lb. 50 cts., 3 lbs. \$1.00. The MARTIN AMBER WHEAT originated in this locality, and I warrant my seed pure. Descriptive circular FREE. Address, J. L. DILLON, Seedman and Florist, BLOOMSBURG, PA.

Imperial Wine Vinegar.

NONPAREIL OIDER VINEGAR.

STRICTLY pure and reliable. Many imitations, costing 3 cents a gallon, are sold as Oider Vinegar. To guard against deception, observe that packages bear our brands.

Fresh APOLINARIS WATER.

FREDK. M. BOLLMAN, Importer
63 S GAY STREET.

GEORGE O. STEVENS, WINDOW SASHES, BLINDS & DOORS 49 LIGHT STREET.

BALTIMORE.

KEEPS IN STOCK AND FURNISHES TO ORDER: Window Sashes, Doors, Blinds, Mouldings, Brackets, Hand Railings, Balusters, Newel Posts, Bracket Shelves, Barge Boards, Window Caps, Door Caps, Pews and Church Work, Blinds, Hinges, Builders' Hardware, Wood Mantels, Window Frames, Door Frames, Paints, Oil, Putty, Glass, Lumber, Bricks, Lime, Sash Weights, Sash Cord, Porch Columns, Tree Boxes. The Best Work at Lowest Prices.

JOSHUA THOMAS & BRO.

STEAM

Agricultural and Mill Machinery

ECLIPSE
AGRICULTURAL ENGINE

FIRST PREMIUM WHEREVER
EXHIBITED.



Best, Cheapest,
and most
Economical En-
gine in the
Market.

STEVENS' ENGINE AND THRESHER,

The old standard, and still ahead of all competitors.

KIRBY AND WHEELER MOWERS AND REAPERS, OSBORNE SELF-BINDING HARVESTER.

A Full Line of Harvesting Machines, adapted to the wants and taste of Farmers any and everywhere.

Union Grain and Fertilizer Drills, Circular Saw Mills

Chieftain Horse Rakes, Portable Grist Mills,

Millstones, Smut Machines, Bolting Cloths, Champion Force Pump,
Mill Picks, Leather and Gum Belting, Cucumber-Wood Pumps,

The Watt and Ball Plows, &c., &c.

Prices and Descriptive Circulars on application, and correspondence solicited from all wanting anything in my line.

OFFICE AND WAREHOUSE,

No. 53 Light St., Baltimore, Md.

GEO. F. SLOAN & BROTHER.

LUMBER,

DOORS, SASH, BRICKS, &C.

IN LOTS TO SUIT.

132 LIGHT STREET WHARF,

BALTIMORE.

GILPIN'S VEGETABLE LIVER PILLS

ARE prepared, with great care, from medical plants; are coated with sugar, that they may be taken by the smallest child and upon the most delicate stomach; are intended especially to act upon the Liver, thereby relieving all such diseases as COSTIVENESS, HEADACHE, PARALYSIS, DYSPEPSIA, COLIC, JAUNDICE, and all diseases of a bilious origin. No better evidence can be offered in favor of these Pills than the very fact that where their ingredients are known to family physicians, they are using them in their private practice. We append the following from one of our most prominent physicians:

OAKLAND, June 25, 1899.—Dr. Gilpin: After carefully examining the formula of your Sugar-Coated Pills, I feel it but justice to say that the combination is certainly perfect, and comprises the only remedies I ever believed were the proper ones to be used in diseases of a bilious origin. I shall take pleasure in recommending them, not only to my patients but the entire medical profession. Yours truly, J. M. WISTAR, M.D.

From one of the leading retail druggists of West Virginia:
WESTON, W. VA., June 18, 1899.—Messrs. Canby, Gilpin & Co.—Gents: Please send by express twelve dozen Gilpin's Vegetable Liver Pills. I have the most flattering accounts from all who have used them, and believe the day is not far distant when they will supersede all others. Yours, F. M. CHALFANT.

We could fill several pages with certificates, etc., from prominent men throughout the country, but prefer to let the Pills in the future, as they have in the past, rest entirely on their own merit, knowing that wherever they are known their use will pass down from generation to generation.

GILPIN'S VEGETABLE LIVER PILLS are sold by all respectable druggists and country store keepers throughout the United States and Canada.

Principal Depot, CANBY, GILPIN & CO., Baltimore.

ESTABLISHED 1826.

SUMMER CLOTHING

FOR MEN, YOUTHS AND BOYS:

LARGEST VARIETY IN THE CITY OF GENUINE AND IMITATION CHEVIOTINE ALPACA, NUNS' CLOTH, DRAP D'ETE, AND SERGE SUITS LINEN MOHAIR AND GLASSE DUSTERS.

OUR CUSTOM DEPARTMENT

Is Complete in its Assortment of Piece Goods from which to order. Styles and Prices to suit all Tastes. All Goods properly Shrunk before being made up. Samples and Prices sent free upon application. Ten per cent. discount allowed to all Clergymen.

NOAH WALKER & CO.

165 and 167 WEST BALTIMORE STREET,
BALTIMORE, MD.THE POPPLEIN
SILICATED PHOSPHATE CO.

Manufacture and have constantly in stock the following Popular Brands of

FERTILIZERS.

THE ACTIVE AMMONIATED BONE,
THE MODEL AMMONIATED BONE,
THE FAVORITE AMMONIATED
SUPER PHOSPHATE,
THE POPPLEIN SILICATED PHOSPHATE,
ALKALINE BONE PHOSPHATE,
SOLUBLE BONE PHOSPHATE,
YARRA GUANO.

Goods Compounded according to any special Formula desired on short Notice.

All Goods Guaranteed.

OFFICE: 128 W. Baltimore Street,
(Under "AMERICAN FARMER.")

Factory at Canton, Baltimore County.

GRAPE VINES

PRENTISS

WE NOW OFFER FOR SALE
PURE No. 1 PERUVIAN GUANO,
Containing about 6 per cent. of AMMONIA and 45 per cent. BONE
PHOSPHATE OF LIME.

The Guano has not been ground or in any manner manipulated. If farmers will compare the above ingredients with the apparently cheaper fertilizers offered for sale, we think they will pronounce Peruvian Guano the cheapest fertilizer (in the strict sense of the word) in the market. It being a natural guano, the cost of manipulation borne by manufactured fertilizers is saved. Many planters are tempted by the price of Acid Phosphates, but less sight of the fact that a large proportion of the 2000 lbs is acid, they therefore not obtaining a full ton of Bone Phosphate. Peruvian Guano is naturally in a form for the seed to at once derive nourishment from.

VOSS BROTHERS,
50 S. GAY STREET, BALTIMORE, MD.FOR FALL PLANTING
Fruit & Ornamental TREES.
SHRUBS, ROSES, &c.

The largest and most complete general stock in the U. S., including many Choice Novelties. Abridged Catalogue mailed Free to all applicants. Address,
ELLWANGER & BARRY Mount Hope Nurseries
Rochester, N. Y.

SOUTH DOWNS

Yearling and 2 Year
Rams.

Also 20 Breeding Ewes from the Best Strains of Henry Webb and Lord Washington for Sale by
SAM. J. SHARPLESS,
703 Walnut St., Philadelphia.

WM. L. BRADBURY,
NASON, ORANGE COUNTY, VA.

High Class Reg. Jersey Bulls.
Duroc or Jersey Red and Small
White Yorkshires.
Hampshire-Downs, Cotswolds and
Merinos.
Houdans, Light Brahmas, Ply-
mouth Rocks.

My imported Hampshire-Downs combine early maturity with large carcass, are very hardy and prolific; best of nurses, good shearers of a fine medium staple wool, that is always in demand. Hampshire bucks crossed on common ewes give size with early maturity to the lambs.

IMPROVED WINTER OATS.

Very choice thoroughly cleaned seed, of a variety I have been growing and improving for eight years. They are rust proof, very hardy and prolific, weigh 28 to 40 lbs. to the bushel, yield enormously. \$1.50 per bushel of 32 lbs., \$12.00 for 10 bushels, \$1.00 for 3 lbs. by mail, 30 cts. for sample by mail.

29 PERCHERONS,

Just landed, and others coming, holding numerous Gold and Silver Medals recently won in France. Send for Catalogue.

A. ROGY,

332 Palisade Ave., Jersey City, N. J.

PRATT'S ASTRAL OIL
WILL NOT EXPLODE.
Wholesale and Retail.

LAMPS OF EVERY DESCRIPTION.

For Sale by W. & H. SPILCKER,
Agents for Ches. Pratt & Co., 163 Baltimore St.
New York.

YOUNG MEN. Now is the time to learn
TELEGRAPHY. Written guarantee given
to furnish paying situations. For terms, address,
COMMERCIAL & N. E. TELEGRAPH OFFICE, Ann Arbor, Mich.

GUNS

OF EVERY KIND CHEAPER THAN EVER.
Rifles, Shot Guns, Revolvers, Ammunition,
Fishing Tackle, Seines, Nets, Knives,
Razors, Skates, Hammocks, etc.
Large Illustrated Catalogue FREE.

Address
GREAT WESTERN GUN WORKS,
PITTSBURGH, PA.

We will send you a watch or a chain
BY MAIL EXPRESS, C. O. D., to be
examined before paying any money
and if not satisfactory, returned at
our expense. We manufacture all
our watches and save you 30 per
cent. Catalogue of 200 styles free.
EVERY WATCH WARRANTED. ADDRESS
STANDARD AMERICAN WATCH CO.,
PITTSBURGH, PA.

FIELD AND GARDEN SEEDS

Our stock of Seeds are new and true to name, embracing all the valuable varieties, and are from the most reliable growers only. Thankful for the commendation and increased patronage which have crowned our efforts to supply the best seed in the market, we will strive to merit confidence.

FERTILIZERS.

GRIFFITH & TURNER'S ANIMAL BONE PHOSPHATE. A high grade Phosphate, a complete fertilizer, always gives good results.
GRIFFITH & TURNER'S ALKALINE PLANT FOOD. Prepared with special adaptation to the growth of Corn, Potatoes, Tobacco and Vegetables requiring Fertilizer rich in Potash.
GRIFFITH & TURNER'S PURE RAW BONE.

HARVESTING MACHINERY.

MCCORMICK'S TWINE BINDER.
MCCORMICK'S IMPERIAL REAPER.
MCCORMICK'S DAISY SINGLE REAPER.
MCCORMICK'S IRON MOWER.

HORSE RAKES.

Both Hand and Self-Dump.

THE DOCTOR BAILEY CUTTER

For Hay, Straw and Fodder.
In Sizes Suited for Hand or Power.

Oliver Chilled Plows

run lighter, are more easily adjusted, and do better work than any other plow.

Malta Shovel Plows. Iron Age Cultivators.
Corn Drags. Cahoon Seed Sowers.
Planet Seed Drill and Cultivator.
Hagerstown Grain Drills. Monarch Grain Drills.
Farmer's Friend Grain Drill.
The Star Horse Rake. The Victor Horse Rake.
The Hagerstown Horse Rake. Foust's Hay Loader.
Bullard's Hay Tedder. American Hay Elevator.
Double Harpoon Hay Fork. Grain Fan.
Philadelphia Lawn Mowers. Cider Mills.
Corn Shellers.
Farmer's Friend Corn Planters. Hay Presses.
Keystone Corn Drills. Hay Straw and Fodder Cutters. Butter Workers.
Stoddard Churns. Davis Swing Churns.
Fountain Pump. Cucumber Pumps.
Maseley's Cabinet Creamery.
Patent Galvanized Steel Fence Wire, cheap, durable and easily put up.

REPAIRING DONE WITH DISPATCH
SEND FOR CIRCULARS.

GRIFFITH & TURNER.

DEALERS IN

Agricultural Implements, Fer-
tilizers and Seeds,
41 & 43 NORTH PACA STREET,
BALTIMORE, MD.

J.M. LAROQUE'S
ANTI BILIOUS
'BITTERS'

For Dyspepsia, Nervousness,
Bilious Attacks, Headache, Cos-
tiveness, and all Diseases of
the Liver and Stomach.

ARE DECIDEDLY THE MOST POTENT REMEDY THAT CAN BE USED.

It is not an intoxicating beverage, and certainly would never be used as a pleasant substitute for alcoholic stimulants, but it is truly a valuable Family Medicine, which has been used for many years by large numbers of our citizens with the most unflinching success in all the above complaints. Try it.

25 Cents a Paper, or \$1.00 a Bottle.
WM. E. THORNTON, Proprietor.
Baltimore, Maryland.

Strawberry Plants.

TWENTY new varieties of the best Bidwell, Manchester, Mt. Vernon, Big Bob, Kentucky, Crescent, Longfellow, Satin Glos, Sharpless, Miner's Prolific, Duchess, Wilson, Downing, Monarch, &c. Also CONCORD GRAPES and RASPBERRY PLANTS, Gregg, Cuthbert, Brandywine, &c. Prices low. Send for descriptive catalogue. Also, EGGS of Plymouth Rock Fowls, from first-class stock, \$1.50 per thirteen.

R. S. COLE,

Cedar Hill Fruit Farm,
HARMANS, A. A. CO., MD.

OXFORD-DOWNS.

As noticed in the COUNTRY GENTLEMAN, Breeders' Gazette, and the press of the country generally, I purchased, in January last, of T. S. Cooper, his entire flock of imported Oxford-Downs, headed by the celebrated prize-winning ram Royal Liverpool, "The Best Son of Freedom." Intending this flock for his own breeding, Mr. Cooper personally selected the finest ewes from the flocks of Messrs. John Treadwell and George Street, considered to be the foremost of English breeders. They are a uniform, handsome lot, carrying large, close and compact fleeces. Mr. Cooper says of them: "The best I ever imported, and the finest flock in the country."

I have now for sale superb lambs, most of them imported in dam, sired by Royal Liverpool, three years first at the Royal Show—Earl of Oxford, first at Royal 1882—Hobbs No. 5, Wallis No. 7, and Lord Derby. A few sired in this country by imported Rotham, Albert of Linden and a son of Street's Perfection. Full pedigree with each lamb.

F. C. GOLDSBOROUGH,
"Ellenborough," Easton P. O., Talbot Co., Md.

WM. FRASER,**Landscape Gardener and Florist.**

STORE, 277 E. Baltimore Street; GREENHOUSE, Belair Avenue, opposite Schuetzen Park.

County seats laid out, Gardens planted and kept in order by the year. Plans and Estimates furnished on application. Plants Trees and Shrubs at the lowest rates. As a guarantee of good work we refer to our record for the past 10 years as Superintendent of Patterson Park.

ANIMAL PORTRAITURE AND FINE**Landscape Photography**

Photographs of Country Residences and Grounds. Interiors, etc., executed in a skillful and artistic manner. Family Groups taken at their homes. Particular attention given to photographing merchandise for druggists' use. Old Daguerreotypes, etc., copied and enlarged to any size.

My Photographs of Live Stock are all made by the New Instantaneous Process. Satisfaction assured. Specimens of my productions can be seen at the office of the American Farmer. All letters of inquiry cheerfully answered.

G. O. BROWN,

305 EAST MONUMENT STREET,
BALTIMORE, MD.

I have also a limited number of choice LIGHT BRAHMA EGGS at \$3.00 for 13—from prize stock at last Baltimore Show.

BERKSHIRES FOR SALE

One Imported Show Boar; One Yearling Boar; Five Boar Pigs, 6 to 8 months old; Five Sow Pigs, 6 to 8 months old; Four Sow Pigs in Farrow.

Could spare one or two Imported Sows.

Three hundred Spring Pigs from noted prize winners that were top selections from the best English and American Herds and the best of my own breeding for several years.

ALEX. M. FULFORD,
Bel Air, Maryland

G. W. LEHMANN, Ph. D. W. MAGER,
Chemist and Metallurgist Formerly Chemist of U. S.
Baltimore, Copper Works. Portland Cement Station

LEHMANN & MAGER,
CHEMISTS AND ASSAYERS,
57 S. GAY ST., BALTIMORE, MD.

ANALYSES of all descriptions—Manures, Soils, Chemical Fertilizers, Ores of Gold and Silver (by fire process), Copper, Lead, Manganese, etc. Clays, Coal, Limestone and other minerals. Water for steam, manufacturing and household use. Mineral waters and various products of art. Terms moderate.

Virginia Lands.

Upper James Real Estate Agency,
By **WILLIAM HOLMAN,**
CARTERSVILLE, Va.

WHO offers for sale upwards of 12,000 acres of land lying in one of the most desirable regions of Eastern Virginia. Catalogues sent on application.

University of the State of New York.
AMERICAN VETERINARY COLLEGE,
141 West 54th Street, New York City.

The Regular Course of Lectures commences in October each year. Circular and information can be had on application to A. LIAUTAUD, M. D. V. S., Dean of the Faculty.

FRUIT TREES.**CLAIRMONT AND FURLEY HALL NURSERIES.**

Established 1828. 300 Acres in Trees.

Our Fruit and Ornamental Trees are unusually fine this season, including Apples, Peaches, Pears, Cherries, Plums, Damsons, Apricots, Nectarines, etc., Grape Vines, Blackberries, Raspberries, Currants, Gooseberries, Strawberries and Asparagus Roots. A very handsome lot of all the varieties of Shade and Ornamental Evergreens, Shrubbery and Orange for hedging.

PEACH TREES.—A very large and handsome stock of the finest well-tested varieties, budded from fruiting trees. The CHAIR'S CHOICE Peach now considered to be the largest and finest of all the late yellow open peaches, fully eight (8) days later than Smock. A lithograph with description and origin of the Chair's Choice sent free on application. To parties planting largely we will deal very liberally. Personal inspection of our nursery desired. Address

Post Office Box 408.

WILLIAM CORSE & SONS,
BALTIMORE, MD.

BURNSIDE PARK HERD,

SAM'L M. SHOEMAKER,

BALTIMORE, - MARYLAND.

M. G. ELLZEY, M. D.,

1012 I Street N. W., Washington, D. C.

Breeder of Highly Bred Gentleman's Roadsters and Saddle Horses, Shorthorn Cattle, Southdown sheep directly from Lord Walsingham's Celebrated Flock, and Purely Bred Berkshire Swine.

Correspondence invited. **PRICES LOW.** Some fine Horses now for sale.

ESTABLISHED **A. E. WARNER,** [1811.]

MANUFACTURER OF

SILVER WARE AND RICH JEWELRY

English, Swiss and American WATCHES of the Best Makers,

Importer and Dealer in Diamonds, Fine Watches, Silver-Plated Ware, Table Cutlery, &c.

WEDDING PRESENTS.

Premiums for Agricultural Fairs, Fine Bronzes, Opera Glasses, Shell Jewelry, &c.
All of which is offered at GREATLY REDUCED PRICES.

No. 135 W. BALTIMORE STREET, near Calvert, Balto.

EASTERN SHORE NURSERIES,

DENTON, CAROLINE CO., MD.

PRICE LIST WILL BE MAILED FREE TO ALL APPLICANTS.

A very fine stock of APPLE TREES, of such kinds as are suited to the soil and climate of Maryland and Virginia. Peach Trees, Pear, Cherry, Apricot, Quince and Nectarine Trees. A large and superior lot of Wild Goose and other Plum Trees. An immense stock of Grape-Vines, embracing 40 kinds, at very low prices. Shade and Ornamental Trees. In short, a complete assortment of carefully grown nursery stock, at prices as low as a reliable and good article can be grown.

Send for Price List before purchasing elsewhere.

J. W. KERR, Proprietor.

MAKE HENS LAY

An English Veterinary Surgeon and Chemist, now traveling in this country, says that most of the Hens and Cattle Powders sold here are worthless trash. He says that Sheridan's Condition Powders are absolutely pure and immensely valuable. Nothing on earth will make hens lay like Sheridan's Condition Powders. Dose, 1 teaspoonful to 1 pint food. Sold everywhere, or sent by mail for 6 letter-stamps. L. S. JOHNSON & CO., Boston, Mass.

John H. Buxton.

Malvin B. Shurtz.

Eclipse Wind Engine!

Victorious at the 4 World's Fairs. Has taken 7 Gold, 6 Silver and 2 Bronze Medals, and 180 First Premiums.



The Railroads of the United States and Canada put in more ECLIPSE MILLS than all others put together. We export more than all others combined. Our Mill is not sold as a cheap Mill, but as the best mill in the world. For last six years I have never received a cent for repairs of any of my mills that I have put up, and have replaced several others by the ECLIPSE. We make 18 sizes, from 8 1/2 to 60 feet in diameter, from 2-horse to 40-horse power, and used for pumping from wells, springs, brooks, rivers, etc. Also have POWER MILLS for grinding grain, shelling corn, sawing wood, cutting fodder, etc. I furnish mills separate, or will contract to do whole job, including tower, pumps, piping, etc., plain or ornamental, and will guarantee to give satisfaction, and refer to the thousands of mills up, as to how they satisfy.

Nonpareil Farm and Feed Mill

FOR GRINDING CORN, BONES, &c.

WYCKOFF PATENT WATER PIPE.

Used in seventy-eight cities as Water Mains, and is the cheapest pipe for Farmers on long runs of pipe for Natural Flow, and from Hydraulic Rams, Water Wheels and Wind Mills, etc. Send for Circulars and Prices.

ADDRESS

JOHN H. BUXTON & CO.

Nos. 19, 21 and 23 E. Pratt Street,

BALTIMORE, MD.

PENNSYLVANIA ROUTE.

FORMED by the Northern Central and Pennsylvania Railroads on the West, Northwest and Southwest to

PITTSBURG, CINCINNATI,
LOUISVILLE, INDIANAPOLIS,
CHICAGO, ST. LOUIS, and
OTHER PROMINENT POINTS.

Baltimore and Potomac, and Alexandria and Fredericksburg Railways on the South to

WASHINGTON, RICHMOND,
and all points in the

ATLANTIC AND GULF STATES.

The Only All Rail Line with no Omnibus Transfer at Washington.

Northern Central, and Philadelphia and Erie Railways on the North to

HARRISBURG, WILLIAMSPORT,
ELMIRA, WATKINS GLENN,
ROCHESTER, ERIE,
BUFFALO, NIAGARA FALLS.

Baggage called for and checked at hotels and private residences through to destination. Sleeping and Parlor Car accommodations secured.

Through Tickets sold and information given at Company's office.

N. E. Cor. Baltimore and Calvert Sts.,

At Depot N. C. Railway,

At Union Depot, Charles St., Station,
And Pennsylvania Ave. Station,

CHAS. E. PUGH, J. R. WOOD,
General Manager. Gen'l Passenger Ag't.
Penna. & N. C. R. R.

WM. F. & GEO. A. HAYS.

VALLEY STOCK FARMS, Churchville, Md.

BREEDERS OF SHORT HORN CATTLE, BERKSHIRE SWINE AND GAME CHICKENS. We have for sale a few Heifers and Heifer Calves, from four to eighteen months old. Also some extra fine young Boars and Sows old enough to breed. Order booked at any time, stock guaranteed as represented, correspondence and personal examination invited.

AHEAD OF ALL COMPETITION

1883.



LAWN MOWER.

FOURTEEN SIZES FOR HAND USE.

Weighing from 21 to 51 lbs.

THREE SIZES FOR HORSE POWER.

Graham, Emlen & Passmore,

Patentees and Manufacturers.

631 MARKET ST.,
PHILADELPHIA, PA.

WANTED—By a Graduate and A. M., of Princeton, Position as TEACHER in a Public or Private School. Five of his pupils having, in three years, without special attention, passed successful examinations before different examiners, (none ever rejected), afford the best proof of his qualifications.

ALBERT E. ACWORTH.

Russum, Md., June 2d, '83.

Mt. Vernon Institute.

Boarding and Day Home School for Girls, No. 46 MT. VERNON PLACE,
Baltimore, Md.

HEALTHY and Beautiful Location. Mrs. M. J. Jones and Mrs. Matland Principals, assisted by able Professors. Language practically taught. The 23d School year will begin September 21st, 1883.

PURE BRED RAMS

and

RAM LAMBS.

Choicest of Breeds for sale by Frank Lovelock, Secretary Piedmont Sheep Breeders and Wool Growers' Association, Gordonsville, Va.

The Hannah More Academy for Girls. Noted for healthfulness, thorough instruction, careful training and refining influences of a Christian home. The next term will begin SEPTEMBER 18th. REV. ARTHUR J. RICH, A. M., M. D., Rector, Reisterstown, Md.

COTSWOLDS.

A FEW PURE BRED EWES AND LAMBS AT REASONABLE RATES,

Address, **A. M. COURTENAY,**

Royal Oak, P. O., Maryland.

"High Grade" Ammoniated Super-Phosphate.
"Bos" Ammoniated Super-Phosphate,
"GRAIN GENERATOR."

DISSOLVED S. C. PHOSPHATE,
 12 to 15 Per Cent. Available Phosphoric Acid.
DISSOLVED ANIMAL BONE.
AGRICULTURAL CHEMICALS.

We have in stock a full line of the above goods

WM. DAVISON & CO. 118 W. LOMBARD STREET,
BALTIMORE.

J. E. TYGERT & CO.
 Manufacturers of



Star Bone Phosphate

IMPORTERS AND DEALERS IN FER-
 TILIZING MATERIALS
 GENERALLY.

OFFICES:
 42 South Delaware Ave., Philadelphia.
 Smyrna, Delaware,
 76 South Street, Baltimore.

W. N. CALVERT & CO.
 General Commission Merchants,
 76 South Street, Baltimore,
 SOUTHERN AGENTS.

MY CONTRACT

Of three years' standing with Messrs. Price & Jenks, of Colorado, having expired by limitation I am now enabled to offer Hereford Cattle to breeders of this and adjoining States. Parties wanting BULL CALVES should apply early.

WM. HENRY DeCOURCY,
 May 18, 1883. Queenstown, Md.

EPISCOPAL FEMALE INSTITUTE.
WINCHESTER, VA.

Rev. J. C. WHEAT, D. D., Principal.
 This is a chartered Institute of the highest grade, with a full corps of well-qualified teachers for Music, the Modern Languages, &c. The terms are moderate. The 10th annual session begins SEPTEMBER 12, 1883. For Circulars address the principal. References: The Bishops and Clergy of Va., W. Va. and Md.

WM. STUART SYMINGTON.

THOS. A. SYMINGTON.

Symington Bros. & Co.,

Office, N.E. Cor. Holliday St. & Exchange Place. Works, Locust Point, Baltimore

Manufacturers of the

ORIOLE FERTILIZERS,

Each grade of these fertilizers is made under a different and distinct formula, and each contains what is most needed by the particular soil for which it is intended. We guarantee our goods exactly as represented.

SYMINGTON BROS. & CO., Manufacturing Chemists.

SLINGLUFF & CO.
 OFFICE, 157 W. Fayette St. } **BALTIMORE.** { WORKS, Foot Leadenhall St.
 Manufacturers and Manipulators of
PHOSPHATES.

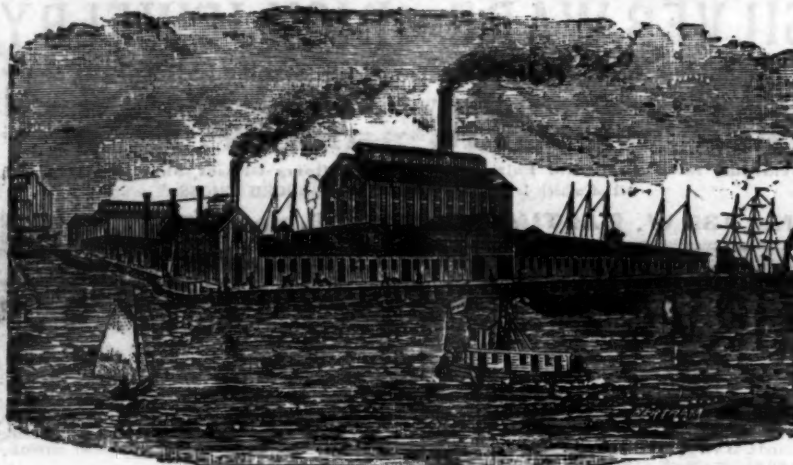
We are now offering to the trade the following **WELL-KNOWN BRANDS OF GOODS**, which we guarantee fully up to the standard:

SLINGLUFF'S DISSOLVED GROUND BONE,
 Containing 3 per cent. of Ammonia.
SLINGLUFF'S DISSOLVED SOUTH AMERICAN BONE ASH,
 Containing 40 to 44 per cent. Soluble Bone Phosphate.
SLINGLUFF'S DISSOLVED SOUTH CAROLINA PHOSPHATE,
 Containing 25 to 33 per cent. Soluble Bone Phosphate.
 To meet the demand for a High-Grade Fertilizer, we are offering
SLINGLUFF'S NATIVE SUPER-PHOSPHATE,
 Prepared entirely from Animal Bone, highly ammoniated. Also,
SLINGLUFF'S No. 1 AMMONIATED SUPER-PHOSPHATE.
 This we can confidently recommend as one of the best fertilizers sold in the market at the price.

The Rasin Fertilizer Company, Peruvian Guano.

PROPRIETORS OF THE

"SEA-WALL GUANO WORKS."



SITUATED ON THE PATAPSCO RIVER, AT SEAWALL, ANNE ARUNDEL CO.

The most extensive and permanent WORKS in the United States, and the whole under the direct supervision of Mr. R. W. L. RASIN, the General Manager of the Company, whose thorough knowledge and experience is a guarantee of the quality of their FERTILIZERS.

Large Stocks on hand and ready for delivery. Your orders Solicited.

The Rasin Fertilizer Company,
 20 & 22 South Street, Baltimore.



HIGH GRADE PERUVIAN GUANO

Direct from PABELLON DE PICA, the richest deposit of Peru, containing 9 1/2 to 10 per cent. of Ammonia, also a full supply from LOBOS' deposits, containing 5 1/2 to 6 per cent. of Ammonia, which I offer for sale direct from Guano storehouses, Water Wharf.

J. Q. A. HOLLOWAY,
 107 McElderry's Wharf,
 BALTIMORE, MD.

Fast Potato Digging!



Write Postal Card for Free Illustrated Circulars. Mention this paper. Address Monarch Manufacturing Co., 163 Randolph St., Chicago, Ill.

SULPHATE OF AMMONIA. PURE NITRATE SODA.

R. J. BAKER & CO.

MANUFACTURERS AND DEALERS IN

Pure Ground Bone, Chemicals, Acids, &c.,
 For Manufacturing Super-Phosphates.

AMMONIATED SUPER-PHOSPHATE FOR ALL CROPS. PURE DISSOLVED RAW BONE. PURE FINE GROUND RAW BONE. STAG SUPER-PHOSPHATE OF LIME FOR TOBACCO.

FACTORY AT LOCUST POINT.

Office, 36 & 38 S. Charles St., Baltimore, Md.

ENTERED AT POSTOFFICE, BALTIMORE, AS SECOND-CLASS MATTER.